Mr. Barney Chan Alameda County Health Care Services Agency (ACHCSA) 1131 Harbor Bay Parkway Alameda, CA 94502

Re:

Fourth Quarter 2004 Vapor Sampling Report

Former Chevron Station 9-0260 21995 Foothill Blvd. Hayward, California Cambria Project No. 31H-1915 ACHCSA No. RO0000143-1

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Dear Mr. Chan:

On behalf of Chevron Environmental Management Company (ChevronTexaco), Cambria Environmental Technology Inc. (Cambria) submits this report summarizing the resultsof four vapor sampling events of 2004 at the site referenced above.

SAMPLING RESULTS

In January 2004, Cambria implemented quarterly sampling of onsite vapor probes VP-1 through VP-3. These three probes were installed July 31, 2003 and consist of three separate depth intervals in each probe location. Soil vapors from these probes were collected and analyzed in January, May, September and December of 2004. The following summarizes the sampling events for the year 2004.

Field Personnel:

Senior Staff Geologists Aja Yee, Sarah Owen, and Kristene Tidwell, Staff Geologist Charlotte Evans, and Staff Scientist Kamran Javandelperformed field sampling under the supervision of California Professional Geologist Robert Foss.

Sampling Dates:

January 23 and 26, May 26, September 29 and 30, and December 21 and 22, 2004.

Soil Vapor Sampling Technique (First through Third Quarters):

volumes, a battery-powered air pump with attached vacuum-chamber and Tedlar™ bag was used to estimate and evacuate an appropriate volume from the sampling point tubing during purging. Purge volume calculations are

Based on calculated purge

presented in Attachment A.

Cambria Environmental Technology, Inc.

5900 Hollis Street Suite A Emeryville, CA 94608 Tel (510) 420-0700 Fax (510) 420-9170

A 30-minute flow meter with vacuum gauge and a 6-liter Summa[™] canister were connected to the sampling tubing at each vapor probe with connector tubing, barbed fittings, and hose clamps. After purging, the Summa[™] canister valve was opened. The vacuum of the Summa[™] canister was used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg was observed on the vacuum gauge.

In accordance with the Los Angeles Regional Water Quality Control Board's (LARWQCB) Advisory-Active Soil Gas Investigations guidance document, dated January 28, 2003, leak testing was performed during sampling. Paper towels soaked in isopropanol (a.k.a. 2-propanol) were placed in open plastic bags that were wrapped around and tied to the sample system connections. A diagram representing the old sampling device is presented in Attachment B.

Soil Vapor Sampling Technique (Fourth Quarter): A 6-liter Summa™ canister with a 30-minute flow control meter was connected to a battery-powered sampling apparatus which was connected to the sampling tubing at each vapor probe. Purging and sampling were conducted with this single apparatus. Purge volumes were calculated using the table presented in Attachment A. A Tedlar™ bag was attached to the battery-powered sampling device and was used to estimate and evacuate the purge volume from each sampling point tube. A diagram representing the new battery-powered sampling apparatus

is presented in Attachment B.

After purging, the valves between the sampling apparatus and sampling point tubing and the valve between the Summa™ canister and the new sampling apparatus were both opened. The vacuum of the Summa™ canister was used to draw the soil vapor through the flow control meter until a negative pressure of approximately 5-inches of Hg was observed on the vacuum gauge.

Leak testing was performed during sampling in accordance with the Los Angeles Regional Water Quality Control Board's (LARWQCB) Advisory-Active Soil Gas Investigations guidance document, dated January 28, 2003. Paper towels soaked in isopropanol (a.k.a. 2-propanol) were placed in open plastic bags that were wrapped around and tied to the sample system connections.



Laboratory Analysis: Vapor samples were analyzed for:

- Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and ethyl tertiary butyl ether (ETBE) by EPA Method T0-15.
- Oxygen, methane, and carbon dioxide by ASTM D 1946M.



HYDROCARBON RESULTS FOR SOIL VAPOR SAMPLES

First Quarter

On January 23 and 26, 2004, vapor probes VP-1 through VP-3 were sampled at three discrete depths. Purging was conducted at a rate of approximately 0.5 liters per second (L/sec). Sampling was conducted at rates ranging from approximately 0.0045 to 0.001 L/sec. Vapor samples were collected in SummaTM canisters after removing approximately three purge volumes from each discrete interval. TPHg vapors collected during this sampling event ranged from 11,000 to 2,500,000micrograms per cubic meter (μ g/m³). TPHg vapor concentrations were greatest at the deepest depth interval in vapor probes VP-1 and VP-2. Benzene vapors collected during this investigation were only detected at 12 fbg in VP-3 at a concentration of 11 μ g/m³. All other benzene samples were below method detection limits (MDLs), which ranged from 6.3 to 1,400 μ g/m³. All MTBE vapors collected during this investigation ranged from <28 to <6,200 μ g/m³ and were below MDLs. MDLs were elevated for a number of samples due to laboratory dilution requirements described below. Soil vapor analytic results are presented in Table 1. Laboratory analytical results for the year are presented in Attachment C.

Some benzene and MTBE method detection limits (MDLs) were elevated, possibly masking any true Hydrocarbon detections. The lab report states that dilution was performed on all samples due to "the presence of high level non-target species." Dilution caused the high MDLs and the "non-target species" was identified as the leak test compound isopropanol. VP1 at 12 fbg and VP3 at 12 fbg had significant vacuum remaining in the Summa canisters. This raised the MDLs further for these two samples.

The leak test compound was detected in all samples. According to the LARWQCB's Advisory-Active Soil Gas Investigations guidance document, compounds such as isopropanol may be used for leak checks. A sample is considered valid if a detection of $10\,\mu g$ /L (4,003 parts per billion volume (ppbv)) or less is observed. During the First Quarter 2004 sampling event, the only sample with an isopropanol concentration < 4,003 ppbv was VP3 at 12 fbg. All other samples failed the leak check, which made the results suspect.

Second Quarter



On May 26, 2004, discrete depth sampling was attempted in vapor probes VP-1 through VP-3. Care was taken to use less isopropanol for the leak test and to tighten the hose clamps to the fullest extent with the goal of lowering MDLs. Soil vapor samples were not collected from VP-1 and VP-3 at 12 fbg due to the high groundwater elevation which submerged the screened interval at this depth. Purging was conducted at rates ranging from approximately 0.1 to 0.5 L/sec. Sampling was conducted at rates ranging from approximately 0.001 to 0.003 L/sec. Vapor samples were collected in Summa™ canisters after removing approximately three purge volumes from each sampling interval. TPHg vapors collected during this sampling event ranged from 7,400 to 16,000 μg/m³. Benzene was detected once, in VP-3 at 9 fbg at a concentration of 2.3 μg/m³. The MDLs for benzene ranged from 2.3 to 2,700 μg/m³. There were no actual detections of MTBE collected during this investigation, and the MDLs ranged from 10 to 12,000 μg/m³. TBA was detected in samples VP-1 at 3 fbg (11 μg/m³), VP-2 at 3 fbg (34 μg/m³), and VP2 at 9 fbg (46 μg/m³).

Three samples (VP-1 at 9 fbg and VP-2 at 9 and 12 fbg) did not pass the leak check in the Second Quarter 2004 and had high benzene detection limits, which resulted in increased MDLs for the VP-2 samples. These samples had concentrations of isopropanol that exceeded the acceptable concentration of <4,003 ppbv of a valid leak check. Isopropanol concentrations in all other samples did not exceed 4,003 ppbv, and therefore passed the leak test.

Third Quarter

On September 29 and 30, 2004, the three vapor probes were sampled. Purging was conducted at rates ranging from approximately 0.1 to 0.5 L/sec. Sampling was conducted at rates ranging from approximately 0.002 to 0.003 L/sec. Vapor samples were collected as described above. TPHg collected during this sampling event ranged from 4,400 to 740,000 μ g/m³. Benzene was only detected in VP-3 at 12 fbg at a concentration of 160 μ g/m³. The MDLs for benzene ranged from 2.6 to 2,100 μ g/m³. There were no detections of MTBE collected during this investigation with MDLs ranging from <12 to <9,700 μ g/m³. TBA was only detected in sample VP-2 at 3 fbg at a concentration of 24 μ g/m³).

Four samples (VP-1 at 9 and 12 fbg, VP-2 12 fbg, and VP-3 at 12 fbg) failed the leak check during this event and had high benzene detection limits which resulted in increased MDLs for some samples. These samples had concentrations of isopropanol that exceeded the acceptable detection limit (4,003 ppbv) of a valid leak check. Isopropanol concentrations in all other samples did not exceed the acceptable detection limit, and therefore passed the leak check.

Fourth Quarter



Vapor samples were again collected on December 21 and 22, 2004. A new vapor sampling apparatus was used to sample soil vapor at the site during the Fourth Quarter 2004. Vapor probes VP-1 and 2 at 3 fbg were both sampled with the new apparatus on December 21, 2004 and then again with the old sampling apparatus on December 22, 2004 to compare the effectiveness of both devices. Purging was conducted at rates ranging from approximately 0.1 to 0.05 L/sec. Sampling was conducted at rates ranging from approximately 0.01 to 0.005 L/sec. Vapor samples were collected as described above. TPHg concentrations during this sampling event ranged from 1,200 to 29,000 μ g/m³. Benzene was detected twice, in VP-2 at 12 fbg and VP-3 at 12 fbg at concentrations of 9.2 and 560 μ g/m³, respectively, with benzene MDLs ranging from <2.2 to <3 μ g/m³. MTBE was only detected in VP2 at 12 fbg at a concentration of 64 μ g/m³. The MDLs for MTBE ranged from <9.8 to <21 μ g/m³.

Every sample passed the leak check in the Fourth Quarter 2004, including those colleted with the old sampling apparatus. Benzene and MTBE MDLs were normal.

Leak Testing

Information on leak testing is presented in Table 3 and also in Attachment E.

Biodegradation

Selected soil vapor samples have been periodically analyzed for oxygen, carbon dioxide, and methane to determine if biodegradation of hydrocarbons is occurring. Concentrations of these constituents in soil vapor samples are presented in Table 1.

CONCLUSIONS

A comparison of soil vapor concentrations from Third Quarter 2003 through Fourth Quarter 2004 is presented in Attachment E as trend graphs showing concentrations of TPHg, benzene, and MTBE versus time for vapor probes VP-1 through VP-3. Any non-detected concentrations were represented as half of the MDL. Concentrations on these graphs represent samples collected with the old apparatus, except for those from Fourth Quarter 2004, which were collected with the new sampling apparatus. These graphs generally indicate that concentrations of all analyzed constituents increase with depth, as expected. Another trend indicated by the graphs is that soil vapor concentrations of TPHg have decreased by one order of magnitude or greater since Third Quarter 2003. Concentration trends of benzene and MTBE cannot be evaluated due to varying detection limits, except for VP-3 at 12 fbg, which has shown increases since Third Quarter 2003. TBA concentrations were detected for the first time in samples collected during the Second Quarter 2004, but there were no TBA detections during Fourth Quarter 2004.



Analysis of leak test compound concentrations indicates that the new sampling apparatus is an improvement over the old sampling device. Until further improvements are devised, Cambria will continue to use the new sampling apparatus to collect soil vapor samples.

Samples collected during the First Quarter 2004 show that soil vapor concentrations in all samples except for VP-2 at 9 fbg contain oxygen concentrations at much lower and carbon dioxide concentrations much higher levels than found in ambient air. When samples can be considered valid by passing leak checks, these concentrations suggest that aerobic biodegradation of hydrocarbons is occurring. Methane concentrations in soil vapor samples from VP-1 at 12 fbg and VP-2 at 12 fbg suggest that anaerobic biodegradation of hydrocarbons may be occurring in the oxygen-depleted saturated zone.

Table 2 presents a comparison of cumulative soil vapor analytic results to the Regional Water Quality Control Board-San Francisco Bay Region's (RWQCB-SFBR's) environmental screening levels (ESLs) for shallow (≤3 meters below grade) soil gas used to evaluate indoor air impacts for the lowest residential exposure. The RWQCB-SFBR has no ESLs for deep (≥3 meters below grade) soil gases. At this site, we have considered samples collected from 3 and 9 fbg to be shallow samples and therefore subject to the RWQCB-SFBR's ESLs. TPHg concentrations below the RWQCB-SFBR's ESLs are as follows: VP-1 at 3 fbg since Second Quarter 2004, VP-1 at 9 fbg for Fourth Quarter 2004 only, VP-2 at 3 and 9 fbg since Third Quarter 2004, VP-3 at 3 fbg since Second Quarter 2004, and VP-3 at 9 fbg since Third Quarter 2004. All valid shallow soil vapor sample concentrations of benzene and MTBE since Third Quarter 2003 are below the RWQCB-SFBR's ESLs.

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CLOSING

Please contact Robert Foss at (510) 420-3348 with any questions or comments regarding this report.

Sincerely,

Cambria Environmental Technology, Inc.



Charlotte Evans Staff Geologist

Sarah Owen

Figures:

cc:

Senior Staff Geologist

Robert Foss, P.G. Associate Geologist

1 –Vicinity Map

2 - Site Plan

Tables: 1 – Analytic Results for Soil Vapor

2 - Analytic Results for Soil Vapor Compared to ESLs for Shallow Soil Gas

3 - Leak Check Results

Attachments: A – Purge Volume Calculations

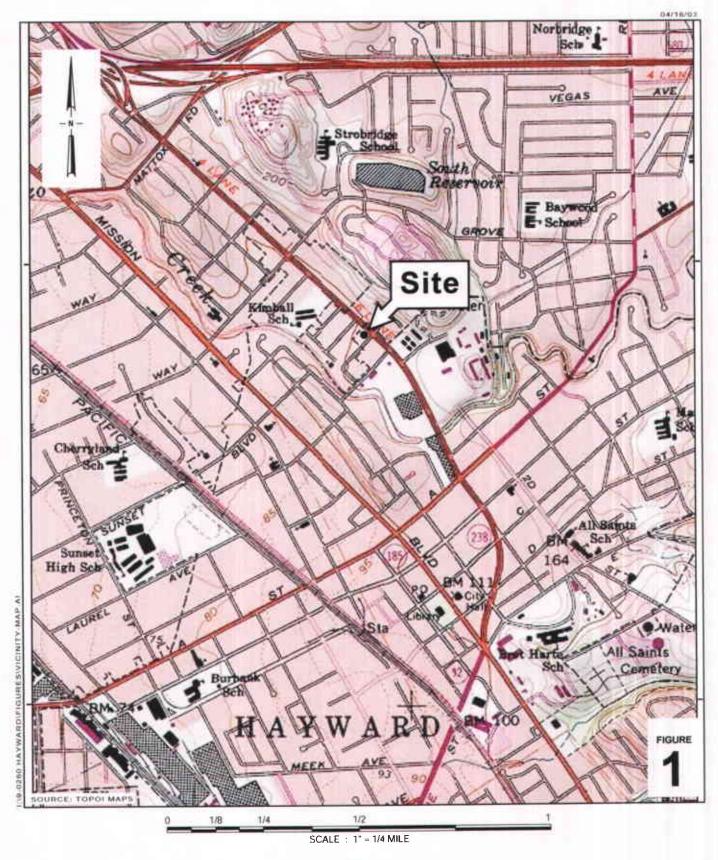
B – Diagram of Old and New Sampling Apparatus C – Cumulative Laboratory Soil Vapor Analytic Results

D - Soil Vapor Trend Graphs

Mark Inglis, Chevron Environmental Management Company, P.O. Box 6012,

San Ramon, CA 94583

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Former Chevron Station 9-0260

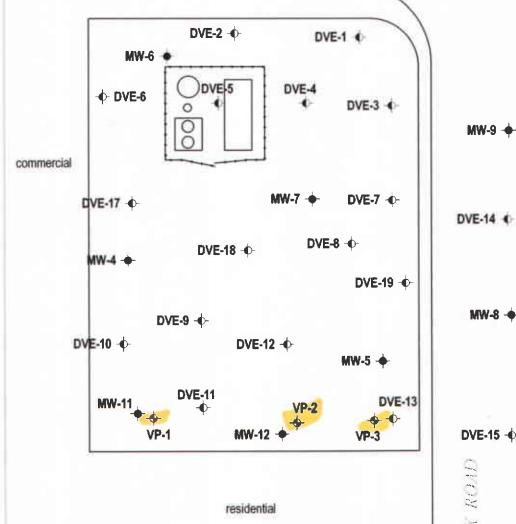


Vicinity Map

21995 Foothill Boulevard Hayward, California

CAMBRIA

FOOTHILL BOULEVARD



Former Standard Service Station No. 1230

MW-8 -

MW-9 💠

DVE-15 ◆

RIN RINE

DVE-16 -

MW-13 30

Scale (ft)

15

FIGURE

Former Chevron Station 9-0260

Vapor probe locaiton

EXPLANATION

Monitoring well location

Dual vacuum extraction well location

21995 Foothill Boulevard Hayward, California

MW-1 -∳-

VP-1 ◆

DVE-11 -**⊕**-



CAMBRIA

Site Plan

Table 1. Analytic Results for Soil Vapor - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPHg	В	T	E	Χ'	MTBE ²	TBA ²	Oxygen	Methane	Carbon dioxide
ID	Date	Interval (fbg)	Time (minutes)		Concentrations (eported in micr	ograms per cubi	c meter - µg/m³			(% volume)	(% volume)	(% volume)
VP-1^	8/26/03	3.0-4.5	40	60,000	<21	26	<28	<28	<94	< 79	NA	NA	NA
VP-1^	1/23/04	3.0-4.5	22	69,000	<39	<46	<54	<54	<180	<150	8.0	0.00021	4.7
VP-1^	1/23/04	3.0-4.5*	39	11,000	< 6.3	<7.4	<8.6	<8.6	<28	<24	9.5	0.00018	4.4
VP-1^	5/26/04	3.0-4.5	37	7,400	<2.5	3.8	8.5	48°	<11	11	NA	NA	NA
VP-1^	9/30/04	3.0-4.5	39	5,700	< 5.0	< 6.0	< 6.9	< 6.9	<23	<19	19	NA	3.8
VP-1^	12/22/04	3.0-4.5	35	1,900	<2.6	<3.0	<3.5	3.9	<12	<9.8	NA	NΛ	NA
VP-1	12/21/04	3.0-4.5	43	1,600	<2.5	4.1	<3.4	12.2ª	<11	<9.6	NA	NA	NA
VP-1^	8/26/03	8.0-9.5	90	81,000	<26	<31	<36	<36	<120	<99	NA	NA	NA
VP-1^	1/23/04	8.0-9.5	46	18,000	< 9.4	<11	<13	<13	<42	<35	16	0.00018	2.6
VP-1^	1/23/04	8.0-9.5**		18,000	< 9.4	<11	<13	<13	<42	<35	NA	NA	NA
VP-1^	5/26/04	8.0-9.5	44	15,000	<2.4	<2.8	<3.2	<3.2	<11	< 9.0	NA	NA	NA
VP-1^	9/30/04	8.0-9.5	37	14,000	<24	<28	<32	<32	<110	<90	17	NA	5.6
VP-1	12/21/04	8.0-9.5	39	3,800	<2.4	<2.9	<3.3	4.9	<11	<9.2	NA	NA	NA
VP-1^	8/26/03	12.0-13.5	120	160,000	26	25	<16	17	<52	<44	NA	NA	NA
VP-1^	1/23/04	12.0-13.5	62	75,000	<24	<28	<33	<33	<110	<92	3.5	0.0038	6.0
VP-1^	5/26/04	12.0-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VP-1^	10/1/04	12.0-13.5	66 .	460,000	<1700	<2000	<2300	<2300	<7700	<6500	16	0.012	4.5
VP-1	12/21/04	12.0-13.5	60	1,600	< 3.0	5.6	<4.1	5.7	<14	<16	NA	NA	NA

Table 1. Analytic Results for Soil Vapor - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPHg	В	Ţ	Е	\mathbf{X}^{1}	MTBE ²	TBA ²	Oxygen	Methane	Carbon dioxide
ID	Date	Interval (fbg)	Time (minutes)	• •	Concentrations r	eported in micro	ograms per cubi	c meter - µg/m³			(% volume)	(% volume)	(% volume)
VP-2^	8/26/03	3.0-4.5	35	63,000***	<11	160	<15	18	<49	<41	NA	NA	NA
VP-2^	1/23/04	3.0-4.5	32	13,000	< 6.4	9.6	<8.8	<8.8	<29	<24	12	< 0.00015	0.3
VP-2^	5/26/04	3.0-4.5	41	12,000	<2.6	3.1	<3.5	6.3	<12	34	NA	NA	NA
VP-2^	9/29/04	3.0-4.5	41	4,100	<4.4	7.6	< 5.9	< 5.9	<20	24	20	NA	2.0
VP-2^	9/29/04	3.0-4.5**		4,400	<4.4	8.2	< 5.9	< 5.9	<20	24	NA	NA	NA
VP-2^	12/22/04	3.0-4.5	21	340	< 6.5	<7.6	<8.8	<8.8	<29	<24	NA	NA	NA
VP-2	12/21/04	3.0-4.5	34	1,200	<2.5	<2.9	<3.4	<3.4	<11	<9.4	NA	NA	NA
VP-2^	8/26/03	8.0-9.5	45	66,000***	13	77	<15	<15	<50	<44	NA	NA	NA
VP-2^	1/26/04	8.0-9.5	36	47,000	<25	<29	<34	<34	<110	<94	10	< 0.00015	0.0
VP-2^	1/26/04	8.0-9.5**		NA	NA	NA	NA	NA	NA	NA	10	< 0.00015	0.0
VP-2^	5/26/04	8.0-9.5	36	14,000	<2.8	3.7	< 3.9	<3.9	<13	46	NA	NA	NA
VP-2^	5/26/04	8.0-9.5 [∆]	29	16,000	<130	<150	<170	<170	< 580	<490	NA	NA	NA
VP-2^	9/30/04	8.0-9.5	35	6,400	<3.5	<4.1	<4.8	<4.8	<16	<13	19	0.00018	0.2
VP-2^	9/30/04	8.0-9.5 [△]	35	6,200	<13	<15	<18	<18	<59	< 50	19	NA	0.2
VP-2	12/21/04	8.0-9.5	29	2,400	<2.7	<3.2	<3.6	<3.6	<12	<10	NA	NA	NA
VP-2	12/21/04	8.0-9.5 [△]	29	1,800	<2.4	<2.9	<3.3	<3.3	<11	<9.2	NA	NA	NA
VP-2^	8/26/03	12.0-13.5	35	96,000***	14	130	<15	26	95	<42	NA	NA	NA
VP-2^	1/26/04	12.0-13.5	95	2,500,000	<1400	<1600	<1900	<1900	<6200	<5200	17	0.0011	0.7
VP-2^	5/26/04	12.0-13.5	90	<68,000	<2700	<3100	<3600	<3600	<12000	<10000	NA	NA	NA
VP-2^	10/1/04	12.0-13.5	35	360,000	<2100	<2500	<2900	<2900	<9700	<8100	7.4	0.0041	5.4
VP-2^	10/1/04	12.0-13.5**		NA	NA	NA	NA	NA	NA	NA	7.4	0.0042	5.4
VP-2	12/21/04	12.0-13.5	70	9,800	9.2	5.4	<3.4	5.8	64	< 9.6	NA	NA	NA

Table 1. Analytic Results for Soil Vapor - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPHg	В	T	Е	X ¹	MTBE ²	TBA ²	Oxygen	Methane	Carbon dioxide
ID	Date	Interval (fbg)	Time (minutes)		Concentrations	reported in micr	ograms per cubi	c meter - µg/m			(% volume)	(% volume)	(% volume)
VP-3^	8/26/03	3.0-4.5	37	53,000	<10	28	<14	<14	<45	<38	NA	NA	NA
VP-3^	1/26/04	3.0-4.5	75	22,000	<12	<15	<17	<17	<57	<48	12	< 0.00016	0.1
VP-3^	5/26/04	3.0-4.5	34	10,000	<2.7	<3.1	<3.6	5.1	<12	<10	NA	NA	NA
VP-3^	9/29/04	3.0-4.5	33	4,900	<2.6	27	<3.5	6.4	<12	< 9.8	21	NA	1.2
VP-3	12/22/04	3.0-4.5	50	2,000	<2.2	4.3	<3.0	7	<9.8	<8.2	NA	NA	NA
VP-3^	8/26/03	8.0-9.5	35	68,000	17	46	<14	<14	<48	<40	NA	NA	NA
VP-3^	1/26/04	8.0-9.5	31	390,000	<260	<300	<350	<350	<1200	<970	9.5	< 0.00016	0.9
VP-3^	5/26/04	8.0-9.5	40	12,000	2.3	18	<3.1	7.9	<10	<8.7	NA	NA	NA
VP-3^	5/26/04	8.0-9.5**		12,000	<2.3	18	<3.1	7.6	<10	<8.7	NA	NA	NA
VP-3^	9/29/04	8.0-9.5	35	8,000	< 2.6	15	<3.6	5	<12	<9.9	18	0.00018	3.0
VP-3	12/22/04	8.0-9.5	37	3,200	<2.5	<2.9	<3.4	3.7	<11	<9.4	NA	NA	NA
VP-3^	8/26/03	12.0-13.5	35	140,000	54	27	<14	21	<46	<39	NA	NA	NA
VP-3^	1/26/04	12.0-13.5	56	11,000	11	24	<15	16	<49	<41	14	< 0.00067	1.0
VP-3^	5/26/04	12.0-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VP-3^	9/29/04	12.0-13.5	48	740,000	160	<150	<180	<180	< 590	<500	13	0.00055	5.1
VP-3	12/22/04	12.0-13.5	50	29,000	560	42	24	39°	<21	<17	NA	NA	NA
VP-3	12/22/04	12.0-13.5**		29,000	560	41	25	42°	<21	<17	NA	NA	NA

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene and xylenes (BTEX) and oxygenates including methyl tertiary butyl ether (MTBE) by EPA T0-15.

Oxygen, methane, and carbon dioxide by ASTM D-1946M.

 $\leq x =$ Not detected above method detection limit.

fbg = Feet below grade.

NA = Not analyzed.

NS = Not sampled; screened interval submerged.

- 1 = Values for m,p-Xylenes only. No o-Xylenes detected in any sample.
- 2 = Except for MTBE, no other analyzed oxygenates were detected.
- * = Field duplicate collected immediately after original sample.
- ** = Lab method duplicate.
- *** = Values may contain up to an 11% error due to sampling system malfunction.
- Δ = Field duplicate collected simultaneously with original sample.
- = 2-propanol exceeded valid leak check compound concentration.
- ^ = Results from using old sampling apparatus. As of 4Q04, new sampling apparatus used.
- ^a = Values for all Xylenes

Table 2. Analytic Results for Soil Vapor Compared to ESLs for Shallow Soil Gas-Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Sample	TPHg	TPHg	В	В	T	T	E	Е	X	X	MTBE	MTBE
lD	Date	Depth (fbg)		ESI.		ESL		ESL		ESL		ESL		ESL
							Concentrations 1	reported in micro	ograms per cubic	meter -µg/m³				
VP-1	8/26/03	3.0-4.5	60,000	10,000	<21	84	26	8,300	<28	2,200	<28	21,000	<94	9,400
VP-1^	1/23/04	3.0-4.5	69,000*	10,000	<6.3	84	<7.4	8,300	<8.6	2,200	<8.6	21,000	<28	9,400
VP-1^	5/26/04	3.0-4.5	7,400	10,000	<2.5	84	3.8	8,300	8.5	2,200	48	21,000	<1 i	9,400
VP-1^	9/30/04	3.0-4.5	5,700	10,000	<5.0	84	< 6.0	8,300	<6.9	2,200	< 6.9	21,000	<23	9,400
VP-1^	12/22/04	3.0-4.5	1,900	10,000	<2.6	84	<3.0	8,300	<3.5	2,200	3.9	21,000	<12	9,400
VP-1	12/21/04	3.0-4.5	1,600	10,000	<2.5	84	4.1	8,300	<3.4	2,200	12.2ª	21,000	<11	9,400
VP-1^	8/26/03	8.0-9.5	81,000	10,000	<26	84	<31	8,300	<36	2,200	<36	21,000	<120	9,400
VP-1^	1/23/04	8.0-9.5	18,000*	10,000	<9.4	84	<11	8,300	<13	2,200	<13	21,000	<42	9,400
VP-1^	5/26/04	8.0-9.5	15,000	10,000	<2.4	84	<2.8	8,300	<3.2	2,200	<3.2	21,000	<11	9,400
VP-1^	9/30/04	8.0-9.5	14,000	10,000	<24	84	<28	8,300	<32	2,200	<32	21,000	<110	9,400
VP-1	12/21/04	8.0-9.5	3,800	10,000	<2.4	84	<2.9	8,300	<3.3	2,200	4.9	21,000	<11	9,400
VP-1^	8/26/03	12.0-13.5	160,000	NA	26	NA	25	NA	<16	NA	17	NA	<52	NA
VP-1^	1/23/04	12.0-13.5	75,000	NA	<24	NA	<28	NA	<33	NA	<33	NA	<110	NA
VP-1^	5/26/04	12.0-13.5	NS	NA	NS	NA	NS	NA	NS	NA	NS	NA	NS	NA
VP-1^	10/1/04	12.0-13.5	460,000	NA	<1700	NA	<2000	NA	<2300	NA	<2300	NA	<7700	NA
VP-1	12/21/04	12.0-13.5	1,600	NA	<3.0	NA	5.6	NA	<4.1	NA	5.7	NA	<14	
VP-2^	8/26/03	3.0-4.5	63,000	10,000	<11	84	160	8,300	<15	2,200	18	21,000	<49	9,400
VP-2^	1/23/04	3.0-4.5	13,000	10,000	< 6.4	84	9.6	8,300	<8.8	2,200	<8.8	21,000	<29	9,400
VP-2^	5/26/04	3.0-4.5	12,000	10,000	<2.6	84	3.1	8,300	<3.5	2,200	6.3	21,000	<12	9,400
VP-2^	9/29/04	3.0-4.5	4,100	10,000	<4.4	84	7.6	8,300	<5.9	2,200	<5.9	21,000	<20	9,400
VP-2^	12/22/04	3.0-4.5	340	10,000	<6.5	84	<7.6	8,300	<8.8	2,200	<8.8	21,000	<29	9,400
VP-2	12/21/04	3.0-4.5	1,200	10,000	<2.5	84	<2.9	8,300	<3.4	2,200	<3.4	21,000	<11	9,400
VP-2^	8/26/03	8.0-9.5	66,000	10,000	13	84	77	NA	<15		<15	NA	<50	9,400
VP-2^	1/26/04	8.0-9.5	47,000	10,000	<25	84	<29	NA	<34	NA	<34	NA	<110	9,400
VP-2^	5/26/04	8.0-9.5	16,000*	10,000	<2.8	84	3.7	NA	<3.9	NA	<3.9	NA	<13	9,400
VP-2^	9/30/40	8.0-9.5	6,400	10,000	<3.5	84	<4.1	NA	<4.8	NA	<4.8	NA	<16	9,400
VP-2	12/21/04	8.0-9.5	2,400	10,000	<2.7	84	<3.2	NA	<3.6	NA	<3.6	NA	<12	9,400

Table 2. Analytic Results for Soil Vapor Compared to ESLs for Shallow Soil Gas- Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Sample	TPHg	TPHg	В	В	Т	T	E	E	Х	X	MTBE	MTBE
ID	Date	Depth (fbg)		ESŁ		ESI.		ESL		ESL		ESL		ESL
							Concentrations 1	eported in micro	ograms per cubic	meter -µg/m ³				
VP-2^	8/26/03	12.0-13.5	96,000	NA	14	NA	130	NA	<15	NA	26	NA	95	NA
VP-2^	1/26/04	12.0-13.5	2,500,000	NA	<1400	NA	<1600	NA	<1900	NA	<1900	NA	<6200	NÁ
VP-2^	5/26/04	12.0-13.5	<68,000	NA	<2700	NA	<3100	NA	<3600	NA	<3600	NA	<12000	NA
VP-2^	10/1/04	12.0-13.5	360,000	NA	<2100	NA	<2500	NA	<2900	NA	<2900	NA	<9700	NA
VP-2	12/21/04	12.0-13.5	9,800	NA	9.2	NA	5.4	NA	<3.4	NA	5.8	NA	64	NA
VP-3^	8/26/03	3.0-4.5	53,000	10,000	<10	84	28	8,300	<14	2,200	<14	21,000	<45	9,400
VP-3^	1/26/04	3.0-4.5	22,000	10.000	<12	84	<15	8,300	<17	2,200	<17	21,000	<57	9,400
VP-3^	5/26/04	3.0-4.5	10,000	10,000	<2.7	84	<3.1	8,300	<3.6	2,200	5.1	21,000	<12	9,400
VP-3^	9/29/04	3.0-4.5	4,900	10,000	<2.6	84	27	8,300	<3.5	2,200	6.4	21,000	<12	9,400
VP-3	12/22/04	3.0-4.5	2,000	10,000	<2.2	84	4.3	8,300	<3.0	2,200	7	21,000	<9.8	9,400
VP-3^	8/26/03	8.0-9.5	68,000	10,000	17	84	46	NA	<14	NA	<14	NA	<48	9,400
VP-3^	1/26/04	8.0-9.5	390,000	10,000	<260	84	<300	NA	<350	NA	<350	NA	<1200	9,400
VP-3^	5/26/04	8.0-9.5	12,000*	10,000	2.3	84	18	NA	<3.1	NA	7.9	NA	<10	9,400
VP-3^	9/29/04	8.0-9.5	8,000	10,000	<2.6	84	15	NA	<3.6	NA	5	NA	<12	9,400
VP-3	12/22/04	8.0-9.5	3,200	10,000	<2.5	84	<2.9	NA	<3.4	NA	3.7	NA	<11	9,400
VP-3^	8/26/03	12.0-13.5	140,000	NA	54	NA	27	NA	<14	NA	21	NA	<46	NA
VP-3^	1/26/04	12.0-13.5	11,000	ΝA	11	NA	24	NA	<15	NA	16	NA	<49	NA
VP-3^	5/26/04	12.0-13.5	NS	NA	NS	NA	NS	NA	NS	NA	NS	NA	NS	NA
VP-3^	9/29/04	12.0-13.5	740,000	NA	160	NA	<150	NA	<180	NA	<180	NA	<590	NA
VP-3	12/22/04	12.0-13.5	29,000	NA	560	NA	42	NA	24	NA	39ª	NA	<2i	NA

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene and xylenes (BTEX) and oxygenates including methyl tertiary butyl ether (MTBE) by EPA T0-15.

< x =Not detected above method detection limit.

fbg = Feet below grade.

NA = Not analyzed.

NS = Not sampled; screened interval submerged.

ESL = Environmental screening level.

ESL values are for shallow (<5 fbg) soil gas for evaluation of indoor air impacts for the lowest residential exposure. Assumes very permeable material.

ESL values for deep (>5 fbg) soil gas for evaluation of indoor air impacts should be carried out on a site-specific basis.

All ESL values and informatin taken from the RWQCB-SFBR's Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwatedated July 2003.

^{* =} Sample results of originals and duplicates have been composited so that the highest TPHg concentration and the lowest benzene detection limit are seen together.

^{^ =} Results from using old sampling apparatus. As of 4Q04, new sampling apparatus used.

^{* =} Values for all Xylenes

Table 3. Leak Check Results - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPHg	2-propanol	Pass/Fail	В	Т	E	X ¹	MTBE ²	TBA ²
_ ID	Date	Interval (fbg)	Time (minutes)		Conc	entrations repo	rted in microg	rams per cubio	meter - µg/r	n³		
VP-1^	8/26/03	3.0-4.5	40	60,000	NS	NS	<21	26	<28	<28	<94	<79
VP-J^	1/23/04	3.0-4.5	22	69,000	110,000	F	<39	<46	<54	<54	<180	<150
VP-1^	1/23/04	3.0-4.5*	39	11,000	13,000	F	<6.3	<7.4	<8.6	<8.6	<28	<24
VP-1^	5/26/04	3.0-4.5	37	7,400	34	P	<2.5	3.8	8.5	48°	<11	11
VP-1^	9/30/04	3.0-4.5	39	5,700	1,900	P	< 5.0	<6.0	< 6.9	< 6.9	<23	<19
VP-1^	12/22/04	3.0-4.5	35	1,900	3,900	P	<2.6	< 3.0	<3.5	3.9	<12	<9.8
VP-1	12/21/04	3.0-4.5	43	1,600	<7.8	P	<2.5	4.1	<3.4	12.2ª	<11	<9.6
VP-1^	8/26/03	8.0-9.5	90	81,000	NS	NS	<26	<31	<36	<36	<120	<99
VP-1^	1/23/04	8.0-9.5	46	18,000	18,000	F	<9.4	<11	<13	<13	<42	<35
VP-1^	1/23/04	8.0-9.5**		18,000	NS	NS	< 9.4	<11	<13	<13	<42	<35
VP-1^	5/26/04	8.0-9.5	44	15,000	1,300	F	<2.4	<2.8	<3.2	<3.2	<11	< 9.0
VP-1^	10/1/04	8.0-9.5	37	14,000	13,000	F	<24	<28	<32	<32	<110	<90
VP-1	12/21/04	8.0-9.5	39	3,800	<7.5	P	<2.4	<2.9	<3.3	4.9	<11	<9.2
VP-1^	8/26/03	12.0-13.5	120	160,000	NS	NS	26	25	<16	17	<52	<44
VP-1^	1/23/04	12.0-13.5	62	75,000	110,000	F	<24	<28	<33	<33	<110	<92
VP-1^	5/26/04	12.0-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VP-1^	10/1/04	12.0-13.5	66	460,000	660,000	F	<1700	<2000	<2300	<2300	<7700	<6500
VP-1	12/21/04	12.0-13.5	60	1,600	170	P	<3.0	5.6	<4.1	5.7	<14	<16

Table 3. Leak Check Results - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPHg	2-propanol	Pass/Fail	В	T	Ë	Χ ¹	MTBE ²	TBA ²
ID	Date	Interval (fbg)	Time (minutes)		Conc	entrations repor	rted in microg	rams per cubic	meter - µg/r	n ³		
VP-2^	8/26/03	3.0-4.5	35	63,000***	NS	NS	<11	160	<15	18	<49	<41
VP-2^	1/23/04	3.0-4.5	32	13,000	20,000	F	< 6.4	9.6	<8.8	<8.8	<29	<24
VP-2^	5/26/04	3.0-4.5	41	12,000	49	P	<2.6	3.1	<3.5	6.3	<12	34
VP-2^	9/29/04	3.0-4.5	41	4,100	1,900	P	<4.4	7.6	< 5.9	< 5.9	<20	24
VP-2^	9/29/04	3.0-4.5**		4,400	2,000	P	<4.4	8.2	< 5.9	< 5.9	<20	24
VP-2^	12/22/04	3.0-4.5	21	340	4,200	P	< 6.5	<7.6	<8.8	<8.8	<29	<24
VP-2	12/21/04	3.0-4.5	34	1,200	<7.6	P	<2.5	<2.9	<3.4	<3.4	<11	<9.4
VP-2^	8/26/03	8.0-9.5	45	66,000***	NS	NS	13	77	<15	<15	<50	<44
VP-2^	1/26/04	8.0-9.5	36	47,000	78,000	F	<25	<29	<34	<34	<110	<94
VP-2^	1/26/04	8.0-9.5**		NA	NS	NS	NA	NA	NA	NA	NA	NA
VP-2^	5/26/04	8.0-9.5	36	14,000	NS	NS	<2.8	3.7	< 3.9	<3.9	<13	46
VP-2^	5/26/04	8.0-9.5 [△]	29	16,000	54,000	F	<130	<150	<170	<170	<580	<490
VP-2^	9/30/04	8.0-9.5	35	6,400	2,000	P	<3.5	<4.1	<4.8	<4.8	<16	<13
VP-2^	9/30/04	$8.0 \text{-} 9.5^{\Delta}$	35	6,200	2,000	P	<13	<15	<18	<18	<59	<50
VP-2	12/21/04	8.0-9.5	29	2,400	8.6	P	<2.7	<3.2	< 3.6	<3.6	<12	<10
VP-2	12/21/04	8.0-9.5 [∆]	29	1,800	<7.5	P	<2.4	<2.9	<3.3	<3.3	<11	<9.2
VP-2^	8/26/03	12.0-13.5	35	96,000***	NS	NS	14	130	<15	26	95	<42
VP-2^	1/26/04	12.0-13.5	95	2,500,000	5,200,000	F	<1400	<1600	<1900	<1900	<6200	<5200
VP-2^	5/26/04	12.0-13.5	90	<68,000	2,200,000	F	<2700	<3100	<3600	<3600	<12000	<10000
VP-2^	10/1/04	12.0-13.5	35	360,000	430,000	F	<2100	<2500	<2900	<2900	<9700	<8100
VP-2	12/21/04	12.0-13.5	70	9,800	280	P	9.2	5.4	<3.4	5.8	64	<9.6
VP-3^	8/26/03	3.0-4.5	37	53,000	NS	NS	<10	28	<14	<14	<45	<38
VP-3^	1/26/04	3.0-4.5	75	22,000	31,000	F	<12	<15	<17	<17	<57	<48
VP-3^	5/26/04	3.0-4.5	34	10,000	10	P	<2.7	<3.1	<3.6	5.1	<12	<10
VP-3^	9/29/04	3.0-4.5	33	4,900	130	P	<2.6	27	<3.5	6.4	<12	<9.8
VP-3	12/22/04	3.0-4.5	50	2,000	6.6"	P	<2.2	4.3	<3.0	7	<9.8	<8.2

Table 3. Leak Check Results - Former Chevron Station 9-0260, 21995 Foothill Blvd., Hayward

Sample	Sample	Probe Depth	Sample Collection	TPIIg	2-propanol	Pass/Fail	В	T	E	X	MTBE ²	TBA ²
1D	Date	Interval (fbg)	Time (minutes)		Conc	entrations repor	rted in microg	rams per cubi	c meter - µg/1	n ^a		
VP-3^	8/26/03	8.0-9.5	35	68,000	NS	NS	17	46	<14	<14	<48	<40
VP-3^	1/26/04	8.0-9.5	31	390,000	820,000	F	<260	<300	<350	<350	<1200	<970
VP-3^	5/26/04	8.0-9.5	40	12,000	19	P	2.3	18	<3.1	7.9	<10	<8.7
VP-3^	5/26/04	8.0-9.5**		12,000	20	P	<2.3	18	<3.1	7.6	<10	<8.7
VP-3^	9/29/04	8.0-9.5	35	8,000	38	P	<2.6	15	<3.6	5	<12	<9.9
VP-3	12/22/04	8.0-9.5	37	3,200	<7.6	P	<2.5	<2.9	<3.4	3.7	<11	<9.4
VP-3^	8/26/03	12.0-13.5	35	140,000	NS	NS	54	27	<14	21	<46	<39
VP-3^	1/26/04	12.0-13.5	56	11,000	<33	P	11	24	<15	16	<49	<41
VP-3^	5/26/04	12.0-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VP-3^	9/29/04	12.0-13.5	48	740,000	>190,000	F	160	<150	<180	<180	<590	<500
VP-3	12/22/04	12.0-13.5	50	29,000	30	P	560	42	24	39ª	<21	<17
VP-3	12/22/04	12.0-13.5**		29,000	30	P	560	41	25	42ª	<21	<17

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene and xylenes (BTEX) and oxygenates including methyl tertiary butyl ether (MTBE) by EPA T0-15.

 \leq x = Not detected above method detection limit.

fbg = Feet below grade.

NA = Not analyzed.

NS = Not sampled; screened interval submerged.

- 1 = Values for m,p-Xylenes only. No o-Xylenes detected in any sample.
- 2 = Except for MTBE, no other analyzed oxygenates were detected.
- * = Field duplicate collected immediately after original sample.
- ** = Lab method duplicate.
- *** = Values may contain up to an 11% error due to sampling system malfunction.
- Δ = Field duplicate collected simultaneously with original sample.
- = 2-propanol exceeded valid leak check compound concentration.
- " = Estimated Value.
- ^ = Sampled with old sampling apparatus.

ATTACHMENT A

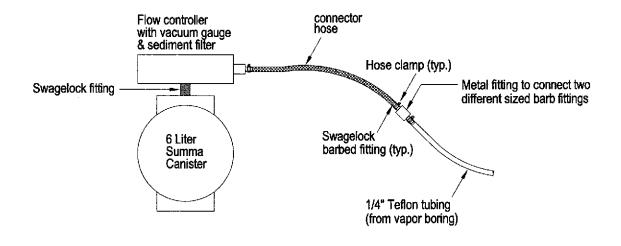
Purge Volume Calculations

Purge Volume Calculations	12 fbg	9 fbg	3 fbg
Value of Pi	3.1416	3.1416	3.1416
Volume of Tubing (Area of a Circle x Length)	9.032 cubic inches	6.676 cubic inches	4.271 cubic inches
Conversion Factor for Cubic Inches to Liters	0.01639	0.01639	0.01639
Purge Volume	0.148 liters	0.109 liters	0.070 liters
Summa Canister Volume	6 liters	6 liters	6 liters
Flow Meter Setting	6 Liters/30 Minutes = 0.2000 liters/minute	6 Liters/30 Minutes = 0.2000 liters/minute	6 Liters/30 Minutes = 0.2000 liters/minute
Convert to Liters Per Second	0.2000 L/min x 1 min/60 sec = 0.0033 L/sec	0.2000 L/min x 1 min/60 sec = 0.0033 L/sec	0.2000 L/min x 1 min/60 sec = 0.0033 L/sec
Purge Time (Purge Volume/Flow Meter Flow Rate	0.148 L/ 0.0033 L/sec = 44.85 sec	0.109 L/ 0.0033 L/sec = 33.03 sec	0.070 L/ 0.0033 L/sec = 21.21 sec

ATTACHMENT B

Diagram of Old and New Sampling Apparatus

Former Sampling Point Apparatus Diagram



Schematic Not to Scale

New Sampling Point Apparatus Diagram Battery Power Flow controller Electrical cord Source with vacuum gauge & sediment filter Valve Swagelock fitting (typ.) Vacuum Gauge 6 Liter Valve Summa Exhaust hose Canister Purge Pump Sampling point tubing fits inside apparatus tubing Valve Apparatus tubing FIGURE 12 Volt **Battery**

Former Chevron Station 9-0260

21995 Foothill Boulevard

Hayward, California

Schematic Not to Scale



Vapor Sampling Apparatus Diagram

CAMBRIA

ATTACHMENT C Cumulative Laboratory Soil Vapor Analytic Results



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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- · Work order Summary;
- · Laboratory Narrative;
- · Results; and
- Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0308547

Work Order Summary

CLIENT:

Mr. Greg Bentley

BILL TO: Mr. 0

Mr. Greg Bentley

Cambria Environmental Technology

Cambria Environmental Technology 5900 Hollis Street

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PROJECT#

310-1915 9-0260

DATE RECEIVED:

08/27/03

CONTACT:

Kelly Buettner

DATE COMPLETED:

09/12/03

			RECEIPT
FRACTION#	<u>NAME</u>	<u>TEST</u>	VAC./PRES.
01A	VP-1@3'	Modified TO-15	5.0 "Hg
02A	VP-2@3'	Modified TO-15	6.0 "Hg
03A	VP-3@3'	Modified TO-15	4.0 "Hg
04A	VP-1@8'	Modified TO-15	5.0 "Hg
05A	VP-2@8'	Modified TO-15	6.5 "Hg
06A	VP-3@8'	Modified TO-15	5.5 "Hg
07A	VP-1@12'	Modified TO-15	7.5 "Hg
08A	VP-2@12'	Modified TO-15	6.5 "Hg
09A	VP-3@12'	Modified TO-15	4.5 "Hg
09AA	VP-3@12' Duplicate	Modified TO-15	4.5 "Hg
10A	Lab Blank	Modified TO-15	NA
10B	Lab Blank	Modified TO-15	NA
10C	Lab Blank	Modified TO-15	NA
11A	CCV	Modified TO-15	NA
11B	CCV	Modified TO-15	NA
11C	CCV	Modified TO-15	NA
12A	LCS	Modified TO-15	NA
12B	LCS	Modified TO-15	NA
12C	LCS	Modified TO-15	NA

CERTIFIED BY:

Sinda d. Fruman

DATE: $\frac{09/12/03}{}$

Laboratory Director

Certification numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified TO-15

Cambria Environmental Technology Workorder# 0308547

Nine 6 Liter Summa Canister samples were received on September 2, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-15	ATL Modifications
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limit
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	= 30% Difference</td <td><!--= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers</p--></td>	= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers</p
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106
IS Recoveries	Within 40% of mean over ICAL for blanks, and w/in 40 % of daily CCV for samples	Within 40% of CCV recoveries for blank and samples

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples VP-1@3', VP-2@3', VP-3@3', VP-1@8', VP-2@8', VP-3@8', VP-1@12', VP-2@12' and VP-3@12' due to the presence of high level non-target species.

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not

performed).

- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated Peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP-1@3' ID#: 0308547-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Date of Collection: 8/20/03
Dil. Factor: 12.9 Date of Analysis: 9/6/03 03:45 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	6.4	21	Not Detected	Not Detected
Toluene	6.4	25	6.8	26
Ethyl Benzene	6.4	28	Not Detected	Not Detected
m,p-Xylene	6.4	28	Not Detected	Not Detected
o-Xylene	6.4	28	Not Detected	Not Detected
Methyl tert-butyl ether	26	94	Not Detected	Not Detected
tert-Amyl methyl ether	26	110	Not Detected	Not Detected
Isopropyl ether	26	110	Not Detected	Not Detected
Ethyl-tert-butyl ether	26	110	Not Detected	Not Detected
tert-Butyl alcohol	26	79	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	130	540	14000	60000

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	96	70-130	
1,2-Dichloroethane-d4	104	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: VP-2@3'

ID#: 0308547-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dil. Factor:	6.72		Date of Analysis: 9/	6/03 06:03 PM
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.4	11	Not Detected	Not Detected
Toluene	3.4	13	42	160
Ethyl Benzene	3.4	15	Not Detected	Not Detected
m,p-Xylene	3.4	15	4.1	18
o-Xylene	3.4	15	Not Detected	Not Detected
Methyl tert-butyl ether	13	49	Not Detected	Not Detected
tert-Amyl methyl ether	13	57	Not Detected	Not Detected

13

13

13

67

57

57

41

280

Not Detected

Not Detected

Not Detected

15000

Not Detected

Not Detected

Not Detected

63000

Container Type: 6 Liter Summa Canister

TPH ref. to Gasoline (MW=100)

Isopropyl ether

Ethyl-tert-butyl ether

tert-Butyl alcohol

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	94	70-130	
1,2-Dichloroethane-d4	97	70-130	
4-Bromofluorobenzene	101	70-130	

SAMPLE NAME: VP-3@3'

ID#: 0308547-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	4/15090616	Market Date of Collection	
Dil Factor:			
			9/6/03 06:37 PM 👙

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.1	10	Not Detected	Not Detected
Toluene	3.1	. 12	7.3	28
Ethyl Benzene	3.1	14	Not Detected	Not Detected
m,p-Xylene	3.1	14	Not Detected	Not Detected
o-Xylene	3.1	14	Not Detected	Not Detected
Methyl tert-butyl ether	12	45	Not Detected	Not Detected
tert-Amyl methyl ether	12	53	Not Detected	Not Detected
Isopropyl ether	12	53	Not Detected	Not Detected
Ethyl-tert-butyl ether	12	53	Not Detected	Not Detected
tert-Butyl alcohol	12	38	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	62	260	13000	53000

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	94	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	101	70-130	

SAMPLE NAME: VP-1@8' ID#: 0308547-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	i091109: 2=-3 16.1	and the second s	Date of Collection: 8/26/03 Date of Analysis: 9/11/03 04:07 PM		
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)	
Benzene	8.0	26	Not Detected	Not Detected	
Toluene	8.0	31	Not Detected	Not Detected	
Ethyl Benzene	8.0	36	Not Detected	Not Detected	
m,p-Xylene	8.0	36	Not Detected	Not Detected	
o-Xylene	8.0	36	Not Detected	Not Detected	
Methyl tert-butyl ether	32	120	Not Detected	Not Detected	
tert-Amyl methyl ether	32	140	Not Detected	Not Detected	
Isopropyl ether	32	140	Not Detected	Not Detected	
Ethyl-tert-butyl ether	32	140	Not Detected	Not Detected	
tert-Butyl alcohol	32	99	Not Detected	Not Detected	

Container Type: 6 Liter Summa Canister

TPH ref. to Gasoline (MW=100)

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	108	70-130	
4-Bromofluorobenzene	96	70-130	

670

19000

81000

160

SAMPLE NAME: VP-2@8'

ID#: 0308547-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: bi090618 Date of Collection: 8/26/03 Dil. Factor: Date of Ahalysis: 9/6/03/07:42 PM Dil. Factor:

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.4	11	4.1	13
Toluene	3.4	13	20	77
Ethyl Benzene	3.4	15	Not Detected	Not Detected
m,p-Xylene	3.4	15	Not Detected	Not Detected
o-Xylene	3.4	15	Not Detected	Not Detected
Methyl tert-butyl ether	14	50	Not Detected	Not Detected
tert-Amyl methyl ether	14	58	Not Detected	Not Detected
Isopropyl ether	14	58	Not Detected	Not Detected
Ethyl-tert-butyl ether	14	58	Not Detected	Not Detected
tert-Butyl alcohol	14	42	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	68	280	16000	66000

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	91	70-130	
1,2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	101	70-130	

SAMPLE NAME: VP-3@8' ID#: 0308547-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	10.56 AS		Date of Collection: 8/26/03 Date of Analysis: 9/6/03 08:10 PM	
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.3	11	5.3	17
Toluene	3.3	12	12	46
Ethyl Benzene	3.3	14	Not Detected	Not Detected
m,p-Xylene	3.3	14	Not Detected	Not Detected
o-Xylene	3.3	14	Not Detected	Not Detected
Methyl tert-butyl ether	13	48	Not Detected	Not Detected
tert-Amyl methyl ether	13	56	Not Detected	Not Detected
Isopropyl ether	13	56	Not Detected	Not Detected
Ethyl-tert-butyl ether	13	56	Not Detected	Not Detected
tert-Butyl alcohol	13	40	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	66	270	16000	68000

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

SAMPLE NAME: VP-1@12'

ID#: 0308547-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dil. Factor:	7.46		Date of Analysis: 9/	6/03 : 08:47 PM
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.6	12	8.2	26
Toluene	3.6	14	6.6	25
Ethyl Benzene	3.6	16	Not Detected	Not Detected
m,p-Xylene	3.6	16	3.9	17
o-Xylene	3.6	. 16	Not Detected	Not Detected
Methyl tert-butyl ether	14	52	Not Detected	Not Detected
tert-Amyl methyl ether	14	61	Not Detected	Not Detected
Isopropyl ether	14	61	Not Detected	Not Detected
Ethyl-tert-butyl ether	14	61	Not Detected	Not Detected
tert-Butyl alcohol	14	44	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	72	300	37000	160000

Container Type: 6 Liter Summa Canister

File Name:

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	91	70-130	
1,2-Dichloroethane-d4	110	70-130	
4-Bromofluorobenzene	102	70-130	

SAMPLE NAME: VP-2@12'

ID#: 0308547-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dit. Factor:	-15890710 *** **** 6.84	Free day of the second of the	Date of Collection: 8/26/03 1 Date of Analysis: 9/7/03 02:26 PM	
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.4	11	4.3	14
Toluene	3.4	13	34	130
Ethyl Benzene	3.4	15	Not Detected	Not Detected
m,p-Xylene	3.4	15	5.8	26
o-Xylene	3.4	15	Not Detected	Not Detected
Methyl tert-butyl ether	14	50	26	95
tert-Amyl methyl ether	14	58	Not Detected	Not Detected
Isopropyl ether	14	58	Not Detected	Not Detected
Ethyl-tert-butyl ether	14	58	Not Detected	Not Detected
tert-Butyl alcohol	14	42	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	68	280	23000	96000

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	93	70-130	
1,2-Dichloroethane-d4	96	70-130	
4-Bromofluorobenzene	105	70-130	

SAMPLE NAME: VP-3@12'

ID#: 0308547-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dii Factor: 6:32		Date of Analysis: 9/7/03 01:19 PM		
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	3.2	10	17	54
Toluene	3.2	12	7.1	27
Ethyl Benzene	3.2	14	Not Detected	Not Detected
m,p-Xylene	3.2	14	4.8	21
o-Xylene	3.2	14	Not Detected	Not Detected
Methyl tert-butyl ether	13	46	Not Detected	Not Detected

54

54

54

39

Not Detected Not Detected

Not Detected

Not Detected

Not Detected

Not Detected

Not Detected

Not Detected

tert-Butyl alcohol TPH ref. to Gasoline (MW=100) 63 260 34000 140000

13

13

13

13

Container Type: 6 Liter Summa Canister

tert-Amyl methyl ether

Ethyl-tert-butyl ether

Isopropyl ether

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP-3@12' Duplicate

ID#: 0308547-09AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	6332		Date of Analysis: 977/03 01:51 PM		
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)	
Benzene	3.2	10	16	53	
Toluene	3.2	12	7.0	27	
Ethyl Benzene	3.2	14	Not Detected	Not Detected	
m,p-Xylene	3.2	14	5.4	24	
o-Xylene	3.2	14	Not Detected	Not Detected	
Methyl tert-butyl ether	13	46	Not Detected	Not Detected	
tert-Amyl methyl ether	13	54	Not Detected	Not Detected	
Isopropyl ether	13	54	Not Detected	Not Detected	
Ethyl-tert-butyl ether	13	54	Not Detected	Not Detected	
tert-Butyl alcohol	13	39	Not Detected	Not Detected	
TPH ref. to Gasoline (MW=100)	63	260	35000	140000	

Container Type: 6 Liter Summa Canister

Container Types o Enter Carrier Carrier		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	92	70-130	
1,2-Dichloroethane-d4	110	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: Lab Blank

ID#: 0308547-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 5090609 500. Factor: 1.00	Collection: NA Analysis: 9/6/03 02:31 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	0.50	1.6	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
tert-Amyl methyl ether	2.0	8.5	Not Detected	Not Detected
Isopropyl ether	2.0	8.5	Not Detected	Not Detected
Ethyl-tert-butyl ether	2.0	8.5	Not Detected	Not Detected
tert-Butyl alcohol	2.0	6.2	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	10	42	Not Detected	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	96	70-130

SAMPLE NAME: Lab Blank ID#: 0308547-10B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	B090707		Bate of Collection: N Date of Analysis: 9/	
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	0.50	1.6	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
tert-Amyl methyl ether	2.0	8.5	Not Detected	Not Detected
Isopropyl ether	2.0	8.5	Not Detected	Not Detected
Ethyl-tert-butyl ether	2.0	8.5	Not Detected	Not Detected
tert-Butyl alcohol	2.0	6.2	Not Detected	Not Detected
TPH ref. to Gasoline (MW=100)	10	42	Not Detected	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	86	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: Lab Blank

ID#: 0308547-10C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Date of Collection: NA

Not Detected

Not Detected

Dil. Factor:	1.00		Date of Analysis: 9	11/03 03/00 PM
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Benzene	0.50	1.6	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
tert-Amyl methyl ether	2.0	8.5	Not Detected	Not Detected
Isopropyl ether	2.0	8.5	Not Detected	Not Detected
Ethyl-tert-butyl ether	2.0	8.5	Not Detected	Not Detected
tert-Butyl alcohol	2.0	6.2	Not Detected	Not Detected

Container Type: NA - Not Applicable

TPH ref. to Gasoline (MW=100)

File Name:

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	101	70-130	
1,2-Dichloroethane-d4	102	70-130	
4-Bromofluorobenzene	98	70-130	

42

10

SAMPLE NAME: CCV

ID#: 0308547-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 5090602	- Date of Collection: NA
	Date of Analysis: 9/6/03 08:46 AM
Dil Factor: 1.00	

Compound	%Recovery
Benzene	109
Toluene	113
Ethyl Benzene	108
m,p-Xylene	110
o-Xylene	112
Methyl tert-butyl ether	107
tert-Amyl methyl ether	97
Isopropyl ether	103
Ethyl-tert-butyl ether	100
tert-Butyl alcohol	107
TPH ref. to Gasoline (MW=100)	Not Spiked

Container Type: NA - Not Applicable		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	103	70-130	
1,2-Dichloroethane-d4	105	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: CCV

ID#: 0308547-11B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	090703	action: NA 14-7 A 19-2 A 19-2
Dil. Factor:		
	1.00	
		ilysis: 9/7/03 09:57 AM

Compound	%Recovery
Benzene	100
Toluene	102
Ethyl Benzene	100
m,p-Xylene	105
o-Xylene	105
Methyl tert-butyl ether	101
tert-Amyl methyl ether	105
Isopropyl ether	111
Ethyl-tert-butyl ether	109
tert-Butyl alcohol	118
TPH ref. to Gasoline (MW=100)	Not Spiked

		wetnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	97	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: CCV

ID#: 0308547-11C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Ing.11n2 Date of Gollection NA
File Name: 1091102 Date of Gollection, NA
Dil. Factor: 1.00 Date of Analysis: 9/11/03 10:27 AM:

%Recovery
109
111
112
110
109
118
103
103
104
108
Not Spiked

Container Type: NA - Not Apphounte		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	97	70-130

SAMPLE NAME: LCS

ID#: 0308547-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	5090603 Date of Collection: NA
	Date of Collection: NA
Dil Factor:	1 On Date of Analysis 9/6/03/09/24 AM
	1:00 Date of Analysis: 9/6/03:09:24 AM

Compound	%Recovery
Benzene	124
Toluene	116
Ethyl Benzene	109
m,p-Xylene	113
o-Xylene	108
Methyl tert-butyl ether	111
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	96	70-130	

SAMPLE NAME: LCS

ID#: 0308547-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	lection: NA alysis: 9/7/03 10:36.AM
Dil. Factor: 1.00 "Date of An	alysis: 9/7/03 10:36 AM
	Property of the second second

Compound	%Recovery
Benzene	119
Toluene	110
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	103
Methyl tert-butyl ether	108
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	97	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	94	70-130	

SAMPLE NAME: LCS ID#: 0308547-12C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1091103 Date of Collection NA	
File Name: 091103 Date of Collection: NA	
Dil. Factor:	
Dill Factor: 1/00 Date of Analysis 9/11/03 11:15 AN	

Compound	%Recovery
Benzene	118
Toluene	113
Ethyl Benzene	112
m,p-Xylene	104
o-Xylene	102
Methyl tert-butyl ether	119
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	97	70-130	
4-Bromofluorobenzene	98	70-130	

CHAIN-OF-CUSTODY RECORD

AIR TOXICS LTD. Sample Fransportation Notice

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180 BLUE PAVINE ROAD, SUITE 9

Page L os I

Contact Person Bob Foss Company Cambria Address 5900 Hollis St., State A Emphyville State CA Zip 94608 Fhore 570-420-0700 FAX 510-420-9170 Collected By: State CA Zip 94608		P.D. A 7 94608 Poris	ect Info: #	⊠Norma	urad Time; al Spec	ily
Collected By: Signature				<u> </u>		48 913163
Field Sample I.D.	Date & Time	Analyses R	equested	Canistel Initial	Pressure Final	/ Vacuum Beckka
OIA VSP-103	8/26/08 12:03		141	-29	-4	50%
O4A VSP-128	13:40	a.t	12 (6)	- 30	~5	50 W
07A VSP-1812	16:50		101 101	-30	-2	75%
02A VSP-2@3	12:25	78462 /		~ 30	-3	60 10
05A VSP-20 8	14:55	081	1	-30	-5	65°K
DEA VSP-2212	16:45	1400-	10 miles	7 - 30	- 5	65 1
OSA: V8P-30-3	13:03	*	No on	-3 <u>0</u>	- 3	4014
OGA VSP-328	15:20	PO	1 1 2	-30	-5	56 4
09A VEP-36/12	17:00	₹\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	00) (B)	-28	- 5	45%
	V					
Reinculated By: (Signature) Date/Firme 9/3/3/14:4 Reinculated By: (Signature) Date/Firme	Preceived By: (Signature), Dysof Clina 15 Hung Mum. (Scaland By: (Signature), Data/Fices	25 1625	98:	•		
Reinequished By: (Signature) Data/Time:	Received By: (Signature) Date/Time	1	1			
Lab Use Only Demples arrived o	FBIT IX Opened By:	- [(JOOC Yes	epila imid <u>oliž</u> No (None)	wako 13085	rde r.₩



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- · Work order Summary;
- Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0401396AR1

Work Order Summary

CLIENT:

Mr. Greg Bentley

BILL TO:

Mr. Greg Bentley

5900 Hollis Street

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

Suite A

Suite A

Emeryville, CA 94608

Emeryville, CA 94608

PHONE:

510-420-3346

P.O. #

9-0260

FAX:

510-420-9170

PROJECT#

9-0260 Hayward

DATE RECEIVED: DATE COMPLETED: 1/29/04

CONTACT:

Taryn Badal

DATE REISSUED:

2/20/04 2/20/04

FRACTION#	NAME	TEST	RECEIPT VAC./PRES.
01A	VP1-3	Modified TO-15	2.5 "Hg
01B	VP1-3	Modified TO-15	2.5 116
02A	VP1-3 dup	Modified TO-15	2.5 "Hg
02B	VP1-3 dup	Modified TO-15	8
03A	VP1-9	Modified TO-15	2.0 "Hg
03AA	VP1-9 Duplicate	Modified TO-15	2.0 "Hg
03B	VP1-9	Modified TO-15	· ·
04A	VP1-12	Modified TO-15	16.5 "Hg
04B	VP1-12	Modified TO-15	_
05A	VP2-3	Modified TO-15	3.0 "Hg
05B	VP2-3	Modified TO-15	
06A	VP2-8	Modified TO-15	3.5 "Hg
06B	VP2-8	Modified TO-15	
07A	VP2-12	Modified TO-15	11.0 "Hg
07B	VP2-12	Modified TO-15	
08A	VP3-3	Modified TO-15	4.0 "Hg
08B	VP3-3	Modified TO-15	
08BB	VP3-3	Modified TO-15	
09A	VP3-8	Modified TO-15	4.5 "Hg
09B	VP3-8	Modified TO-15	

Continued on next page

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0401396AR1

Work Order Summary

CLIENT:

Mr. Greg Bentley

BILL TO:

Mr. Greg Bentley

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

5900 Hollis Street

Suite A Emeryville, CA 94608 Suite A

Emeryville, CA 94608

PHONE:

510-420-3346

P.O. #

9-0260

FAX:

510-420-9170

PROJECT#

9-0260 Hayward

DATE RECEIVED:

1/29/04

CONTACT:

Taryn Badal

DATE COMPLETED: DATE REISSUED: 2/20/04 2/20/04

FRACTION# **NAME** 10A VP3-12 VP3-12 10B 11A Lab Blank Lab Blank 11B 11C Lab Blank 11D Lab Blank 12A **CCV** CCV 12B **CCV** 12C 12D CCV 13A LCS 13B LCS 13C LCS LCS 13D

RECEIPT
VAC/PRES.
24.0 "Hg
NA

CERTIFIED BY:

Sinda d. Fruman

DATE: $\frac{02/20/04}{1}$

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE Modified TO-15

Cambria Environmental Technology Workorder# 0401396AR1

Ten 6 Liter Summa Canister samples were received on January 29, 2004. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-15	ATL Modifications
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limit
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	= 30% Difference</td <td><!--= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers</p--></td>	= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers</p
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

Sample VP1-12 and VP3-12 were received with significant vacuum remaining in the canister. The discrepancy was noted in the Login email. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Dilution was performed on samples VP1-3, VP1-3 dup, VP1-9, VP1-12, VP2-3, VP2-8, VP2-12, VP3-3, VP3-8, and VP3-12 due to the presence of high level non-target species.

THE WORK ORDER WAS RE-ISSUED ON 02/20/04 TO REPORT 2-PROPANOL PER CLIENT REQUEST.

BY CLIENT REQUEST, THE SAMPLE WAS ANALYZED TWICE IN ORDER TO ACCURATELY DETERMINE HIGH-LEVEL COMPOUNDS AND ACHIEVE LOWER DETECTION LIMITS FOR THE REMAINING COMPOUNDS. BOTH RUNS AND ASSOCIATED QC ARE REPORTED.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated Peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1-3

ID#: 0401396AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: \$105.5 \$0		
File Name:	Date of Collection:	
Dil Factor:		
	Date of Analysis: 2/	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	12	Not Detected	39	Not Detected
Toluene	12	Not Detected	46	Not Detected
Ethyl Benzene	12	Not Detected	54	Not Detected
m,p-Xylene	12	Not Detected	54	Not Detected
o-Xylene	12	Not Detected	54	Not Detected
Methyl tert-butyl ether	49	Not Detected	180	Not Detected
tert-Amyl methyl ether	49	Not Detected	210	Not Detected
Isopropyl ether	49	Not Detected	210	Not Detected
Ethyl-tert-butyl ether	49	Not Detected	210	Not Detected
tert-Butyl alcohol	49	Not Detected	150	Not Detected
TPH ref. to Gasoline (MW=100)	240	17000	1000	69000

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	97	70-130

SAMPLE NAME: VP1-3 ID#: 0401396AR1-01B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: DII, Factor:	1 1021717 365	And Spring	Date of Collections of Date of Analysis: 2/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	730	44000	1800	110000
Container Type: 6 Liter Summ	a Canister			
Cumanatas		%Recovery		Method Limits
Surrogates Talana do		99		70-130
Toluene-d8				
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: VP1-3 dup

ID#: 0401396AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s020612 = Date	ot/Gollection: 1/23/04
Dil. Factor:	3.89 Date	of Analysis: 2/6/04/01:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.9	Not Detected	6.3	Not Detected
Toluene	1.9	Not Detected	7.4	Not Detected
Ethyl Benzene	1.9	Not Detected	8.6	Not Detected
m,p-Xylene	1.9	Not Detected	8.6	Not Detected
o-Xylene	1.9	Not Detected	8.6	Not Detected
Methyl tert-butyl ether	7.8	Not Detected	28	Not Detected
tert-Amyl methyl ether	7.8	Not Detected	33	Not Detected
Isopropyl ether	7.8	Not Detected	33	Not Detected
Ethyl-tert-butyl ether	7.8	Not Detected	33	Not Detected
tert-Butyl alcohol	7.8	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	39	2600	160	11000

		Metrion
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

SAMPLE NAME: VP1-3 dup

ID#: 0401396AR1-02B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:			Date of Collection: 1 Date of Analysis: 2/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	78	5200	190	13000
Container Type: 6 Liter Summa	Canister			
Surrogates		%Recovery		Method Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		101		70-130
4-Bromofluorobenzene		99		70-130

SAMPLE NAME: VP1-9 ID#: 0401396AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: \$020613 to \$020613	
Dil Factor: 5.76	: Date of Analysis: 2/6/04/02/23/PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	2.9	Not Detected	9.4	Not Detected
Toluene	2.9	Not Detected	11	Not Detected
Ethyl Benzene	2.9	Not Detected	13	Not Detected
m,p-Xylene	2.9	Not Detected	13	Not Detected
o-Xylene	2.9	Not Detected	13	Not Detected
Methyl tert-butyl ether	12	Not Detected	42	Not Detected
tert-Amyl methyl ether	12	Not Detected	49	Not Detected
Isopropyl ether	12	Not Detected	49	Not Detected
Ethyl-tert-butyl ether	12	Not Detected	49	Not Detected
tert-Butyl alcohol	12	Not Detected	35	Not Detected
TPH ref. to Gasoline (MW=100)	58	4300	240	18000

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	97	70-130

SAMPLE NAME: VP1-9 Duplicate

ID#: 0401396AR1-03AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
File Name: Dil. Factor:	5.76 *	and the second s	Date of Collection: 1 Date of Analysis: 2	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	2.9	Not Detected	9.4	Not Detected
Toluene	2.9	Not Detected	11	Not Detected
Ethyl Benzene	2.9	Not Detected	13	Not Detected
m,p-Xylene	2.9	Not Detected	13	Not Detected
o-Xylene	2.9	Not Detected	13	Not Detected
Methyl tert-butyl ether	12	Not Detected	42	Not Detected
tert-Amyl methyl ether	12	Not Detected	4 9	Not Detected
Isopropyl ether	12	Not Detected	49	Not Detected
Ethyl-tert-butyl ether	12	Not Detected	49	Not Detected
tert-Butyl alcohol	12	Not Detected	35	Not Detected
TPH ref. to Gasoline (MW=100)	58	4300	240	18000

		wiethod
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP1-9 ID#: 0401396AR1-03B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1021719 57.6	W	Date of Collection. Date of Analysis #2/	STATE OF THE STATE
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	120	7300	290	18000
Container Type: 6 Liter Summa	Canister			
Surrogates		%Recovery		Method Limits
Toluene-d8		99		70-130
1,2-Dichloroethane-d4		102		70-130

4-Bromofluorobenzene

99

70-130

SAMPLE NAME: VP1-12 ID#: 0401396AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dil. Factor:	5020615 14.9		Date of Analysis: 2/6/04 03:42 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	7.4	Not Detected	24	Not Detected
Toluene	7.4	Not Detected	28	Not Detected
Ethyl Benzene	7.4	Not Detected	33	Not Detected
m _. p-Xylene	7.4	Not Detected	33	Not Detected
o-Xylene	7.4	Not Detected	33	Not Detected
Methyl tert-butyl ether	30	Not Detected	110	Not Detected
tert-Amyl methyl ether	30	Not Detected	130	Not Detected
Isopropyl ether	30	Not Detected	130	Not Detected
Ethyl-tert-butyl ether	30	Not Detected	130	Not Detected
tert-Butyl alcohol	30	Not Detected	92	Not Detected
TPH ref. to Gasoline (MW=100)	150	18000	620	75000

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP1-12

ID#: 0401396AR1-04B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	Rpt. Limit	Amount	Rpt. Limit	Amount	
Dil. Factor:	119		Date of Analysis: 2/	17/04-08:19 PM	

240

42000 E

590

110000 E

E = Exceeds instrument calibration range.

2-Propanol

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP2-3 ID#: 0401396AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Bil Factor:	\$020616 Date of Gollection: 1/23/04 Date of Applysis, 2/6/04-04:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	2.0	Not Detected	6.4	Not Detected
Toluene	2.0	2.5	7.6	9.6
Ethyl Benzene	2.0	Not Detected	8.8	Not Detected
m,p-Xylene	2.0	Not Detected	8.8	Not Detected
o-Xylene	2.0	Not Detected	8.8	Not Detected
Methyl tert-butyl ether	7.9	Not Detected	29	Not Detected
tert-Amyl methyl ether	7.9	Not Detected	34	Not Detected
Isopropyl ether	7.9	Not Detected	34	Not Detected
Ethyl-tert-butyl ether	7.9	Not Detected	34	Not Detected
tert-Butyl alcohol	7.9	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	40	3100	160	13000

		Metuod
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	97	70-130

SAMPLE NAME: VP2-3 ID#: 0401396AR1-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Date of Collection: 1/23/04

Dit, Factor:	38.4	100	Late of Analysis: «2)	11/04 98:58 KM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
2-Propanol	77	8100 E	190	20000 E

E = Exceeds instrument calibration range.

File Name:

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP2-8 ID#: 0401396AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dil. Factor:	vi - 15.2	ener i Metawa 12 Gal	Date of Analysis: 2	/6/04 04:59 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	7.6	Not Detected	25	Not Detected
Toluene	7.6	Not Detected	29	Not Detected
Ethyl Benzene	7.6	Not Detected	34	Not Detected
m,p-Xylene	7.6	Not Detected	34	Not Detected
o-Xylene	7.6	Not Detected	34	Not Detected
Methyl tert-butyl ether	30	Not Detected	110	Not Detected
tert-Amyl methyl ether	30	Not Detected	130	Not Detected

30

30

30

150

Not Detected

Not Detected

Not Detected

11000

130

130

94

630

Not Detected

Not Detected

Not Detected

47000

Container Type: 6 Liter Summa Canister

TPH ref. to Gasoline (MW=100)

Isopropyl ether

tert-Butyl alcohol

Ethyl-tert-butyl ether

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	98	70-130

SAMPLE NAME: VP2-8

ID#: 0401396AR1-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Date of Collection: 1/26/04

Dil, Factor:	152	ing and displaying a superfici Associate production is also as	Date of Analysis: 2/	17/04 09:86 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	300	31000 E	760	78000 E

E = Exceeds instrument calibration range.
Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	98	70-130

SAMPLE NAME: VP2-12 ID#: 0401396AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: SD20618 Date of Collection: 1/26/04 Dil. Factor; Date of Analysis) 2/6/04 05:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	420	Not Detected	1400	Not Detected
Toluene	420	Not Detected	1600	Not Detected
Ethyl Benzene	420	Not Detected	1900	Not Detected
m,p-Xylene	420	Not Detected	1900	Not Detected
o-Xylene	420	Not Detected	1900	Not Detected
Methyl tert-butyl ether	1700	Not Detected	6200	Not Detected
tert-Amyl methyl ether	1700	Not Detected	7200	Not Detected
Isopropyl ether	1700	Not Detected	7200	Not Detected
Ethyl-tert-butyl ether	1700	Not Detected	7200	Not Detected
tert-Butyl alcohol	1700	Not Detected	5200	Not Detected
TPH ref. to Gasoline (MW=100)	8500	600000	35000	2500000

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	96	70-130

SAMPLE NAME: VP2-12

ID#: 0401396AR1-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: DII. Factor:	1021723 - 17000		Date of Collection: 2 Date of Analysis: 2/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	34000	2100000	85000	5200000
Container Type: 6 Liter Summa	Canister			
Surrogates	•	%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		97		70-130

SAMPLE NAME: VP3-3 ID#: 0401396AR1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: DII. Factor:	s020511 7.75	e programa de la composición del composición de la composición de	Date of Collection: Date of Analysis: 2	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	3.9	Not Detected	12	Not Detected
Toluene	3.9	Not Detected	15	Not Detected
Ethyl Benzene	3.9	Not Detected	17	Not Detected
m,p-Xylene	3.9	Not Detected	17	Not Detected
o-Xylene	3.9	Not Detected	17	Not Detected
Methyl tert-butyl ether	16	Not Detected	57	Not Detected
tert-Amyl methyl ether	16	Not Detected	66	Not Detected
Isopropyl ether	16	Not Detected	66	Not Detected
Ethyl-tert-butyl ether	16	Not Detected	66	Not Detected
tert-Butyl alcohol	16	Not Detected	48	Not Detected
TPH ref. to Gasoline (MW=100)	78	5400	320	22000
Container Type: 6 Liter Summa Car	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		97		70-130

SAMPLE NAME: VP3-3

ID#: 0401396AR1-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil, Factor:	1021809 38.8		Date of Collection: Date of Analysis: 2/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	78	12000 E	190	31000 E
E = Exceeds instrument calibrat	tion range.			
Container Type: 6 Liter Summa	n Canister			Method
Surrogates		%Recovery	-	Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		100		70-130

4-Bromofluorobenzene

97

70-130

SAMPLE NAME: VP3-3

ID#: 0401396AR1-08BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil Factor:	i021844 38.8	Table 1 Section 1	Date of Collection: 1 Date of Analysis: 2/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	78	12000 E	190	30000 E
E = Exceeds instrument ca	· ·			
Container Type: 6 Liter Su	mma Canister			Method
Surrogates		%Recovery		Limits
Toluene-d8		102		70-130
1,2-Dichloroethane-d4		98		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: VP3-8 ID#: 0401396AR1-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name. \$020512	Date of Collection: 1/25/04
	A Date of Attalysis, 2(J)04,90,00 FM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	79	Not Detected	260	Not Detected
Toluene	79	Not Detected	300	Not Detected
Ethyl Benzene	79	Not Detected	350	Not Detected
m,p-Xylene	79	Not Detected	350	Not Detected
o-Xylene	79	Not Detected	350	Not Detected
Methyl tert-butyl ether	320	Not Detected	1200	Not Detected
tert-Amyl methyl ether	320	Not Detected	1300	Not Detected
Isopropyl ether	320	Not Detected	1300	Not Detected
Ethyl-tert-butyl ether	320	Not Detected	1300	Not Detected
tert-Butyl alcohol	320	Not Detected	970	Not Detected
TPH ref. to Gasoline (MW=100)	1600	93000	6600	390000

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: VP3-8

ID#: 0401396AR1-09B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	; i021724 1580	The same of the sa	Date of Collection: Date of Analysis: 2	Contract to the second
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	3200	330000 E	7900	820000 E
E = Exceeds instrument calib	J			
Container Type: 6 Liter Sum Surrogates	ma Canister	%Recovery		Method Limits
Toluene-d8		99		70-130
1,2-Dichloroethane-d4		101		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: VP3-12 ID#: 0401396AR1-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: \$020513	Date of Collection: 1/26/04 Date of Analysis: 2/5/04/06:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	3.4	3.4	11	11
Toluene	3.4	6.3	13	24
Ethyl Benzene	3.4	Not Detected	15	Not Detected
m,p-Xylene	3.4	3.7	15	16
o-Xylene	3.4	Not Detected	15	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
tert-Amyl methyl ether	13	Not Detected	57	Not Detected
Isopropyl ether	13	Not Detected	57	Not Detected
Ethyl-tert-butyl ether	13	Not Detected	57	Not Detected
tert-Butyl alcohol	13	Not Detected	41	Not Detected
TPH ref. to Gasoline (MW=100)	67	2700	280	11000

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	112	70-130	
4-Bromofluorobenzene	99	70-130	

SAMPLE NAME: VP3-12

ID#: 0401396AR1-10B

File Name: Dil. Factor:	÷i021810 6:70		Date of Collection: Date of Analysis: 2	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	13	Not Detected	33	Not Detected
Container Type: 6 Liter Summa	Canister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		103		70-130
1,2-Dichloroethane-d4		104	•	70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: Lab Blank ID#: 0401396AR1-11A

File Name:	s020510a		Date of Collection: I Date of Analysis: 2	CONTRACTOR OF THE PARTY OF THE
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.3	Not Detected
ert-Amyl methyl ether	2.0	Not Detected	8.5	Not Detected
sopropyl ether	2.0	Not Detected	8.5	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.5	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	5.0	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	42	Not Detected
Container Type: NA - Not Applicable	•			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: Lab Blank ID#: 0401396AR1-11B

File Name: 1 Dil. Factor:	s020607a		Pate of Collection." Date of Analysis: 2	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.3	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.5	Not Detected
Isopropyl ether	2.0	Not Detected	8.5	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.5	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	5.0	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	42	Not Detected
Container Type: NA - Not Applicable				
Surrogates		%Recovery		Method Limits
Toluene-d8	"	100		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene	•	97		70-130

SAMPLE NAME: Lab Blank

ID#: 0401396AR1-11C

File Name: Dil. Factor:	1.00 - 1.00	a de	Date of Collection: I Date of Analysis: 2	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	2.0	Not Detected	5.0	Not Detected
Container Type: NA - Not Applic	able			
Surrogates		%Recovery		Method Limits
Toluene-d8	- -	100		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: Lab Blank ID#: 0401396AR1-11D

File Name:		All and The State of the State	Date of Collection: 1 Date of Analysis: 2	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	2.0	Not Detected	5.0	Not Detected
Container Type: NA - Not Applica	ıble			
Surrogates		%Recovery		Method Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		93		70-130

SAMPLE NAME: CCV

ID#: 0401396AR1-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	\$020502 Date of Collection: NA
Dil. Factor:	
	1.00 Date of Analysis: 2/5/04 09:45 AM

Compound	%Recovery
Benzene	88
Toluene	. 87
Ethyl Benzene	87
m,p-Xylene	83
o-Xylene	86
Methyl tert-butyl ether	82
tert-Amyl methyl ether	126
Isopropyl ether	87
Ethyl-tert-butyl ether	84
tert-Butyl alcohol	113
2-Propanol	95
TPH ref. to Gasoline (MW=100)	Not Spiked

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130

SAMPLE NAME: CCV

ID#: 0401396AR1-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Sign Sign Sign Sign Sign Sign Sign Sign
--

Compound	%Recovery
Benzene	87
Toluene	87
Ethyl Benzene	86
m,p-Xylene	82
o-Xylene	86
Methyl tert-butyl ether	84
tert-Amyl methyl ether	82
Isopropyl ether	85
Ethyl-tert-butyl ether	83
tert-Butyl alcohol	84
2-Propanol	96
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	101	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	98	70-130	

SAMPLE NAME: CCV

ID#: 0401396AR1-12C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1021702 Page of Collection NA
File Name: 1021702 Date of Collection NA
rDill. Factor: 1:00 Date of Analysis: 2/17/04 07:32 AM

Compound		%Recovery
2-Propanol		108
Container Type: NA - Not Applicable		
_		Method
Surrogates	%Recovery	Limits
Toluene-d8	103	70-130
1.2-Dichloroethane-d4	101	70-130

4-Bromofluorobenzene

102

70-130

SAMPLE NAME: CCV

ID#: 0401396AR1-12D

File Name: 02	1803 — Date of Co	llection: NA
Dit Factor:		alysis: 2/18/04 03:23 PM
Compound		%Recovery
2-Propanol		128
Container Type: NA - Not Applicable		
	•	Method
Surrogates	%Recovery	Limits Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	89	70-130

SAMPLE NAME: LCS

ID#: 0401396AR1-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: \$02050	5 Date of Collection: NA
Dil. Factor:	Date of Analysis: 2/5/04 12:84 PM

Compound	%Recovery
Benzene	100
Toluene	90
Ethyl Benzene	89
m,p-Xylene	83
o-Xylene	86
Methyl tert-butyl ether	63
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	98
TPH ref. to Gasoline (MW=100)	Not Spiked

		metnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	100	70-130	

SAMPLE NAME: LCS ID#: 0401396AR1-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: S020604 Date of Collection: NA	
File Name: S020604 Date of Collection, NA	
Dill. Factor: 1.00 Date of Analysis: 2/6/04 06:12 AM	
Dill. Factor: 1.00 Date of Analysis: 2/6/04 06:12 AM	

Compound	%Recovery
Benzene	98
Toluene	88
Ethyl Benzene	86
m,p-Xylene	81
o-Xylene	83
Methyl tert-butyl ether	79
tert-Amyl methyl ether	Not Spiked
sopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	102
TPH ref. to Gasoline (MW=100)	Not Spiked

7,000		Method
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	98	70-130

SAMPLE NAME: LCS

ID#: 0401396AR1-13C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	
	Pale of Collections NA
Dil. Factor:	Date of Analysis: 2/17/04-08:47 AN

Compound	%Recovery	
2-Propanol	112	

	Memon	
%Recovery	Limits	
101	70-130	
103	70-130	
101	70-130	
	101 103	

SAMPLE NAME: LCS

ID#: 0401396AR1-13D

DII. Factor:		nalysis: 2/18/04 04:10 PM
Compound		%Recovery
2-Propanol		124
Container Type: NA - Not Applicable		Method
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	90	70-130



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This electronic report includes the following:

- · Work order Summary;
- Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0401396B

Work Order Summary

CLIENT:

Mr. Greg Bentley

BILL TO:

Mr. Greg Bentley

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

5900 Hollis Street Suite A

9-0260

Suite A Emeryville, CA 94608

Emeryville, CA 94608

PHONE:

510-420-3346

P.O. #

FAX:

510-420-9170

PROJECT #

9-0260 Hayward

DATE RECEIVED:

01/29/04

CONTACT:

Taryn Badal

DATE COMPLETED:

02/09/04

RECEIPT **TEST** VAC./PRES. FRACTION# **NAME** Modified ASTM D-1946 2.5 "Hg 01A VP1-3 2.5 "Hg Modified ASTM D-1946 02A VP1-3 dup Modified ASTM D-1946 2.0 "Hg 03A VP1-9 04A VP1-12 Modified ASTM D-1946 16.5 "Hg VP2-3 Modified ASTM D-1946 3.0 "Hg 05A Modified ASTM D-1946 3.5 "Hg 06A VP2-8 Modified ASTM D-1946 3.5 "Hg 06AA VP2-8 Duplicate 11.0 "Hg Modified ASTM D-1946 VP2-12 07A 4.0 "Hg 08A VP3-3 Modified ASTM D-1946 Modified ASTM D-1946 4.5 "Hg VP3-8 09A 10A VP3-12 Modified ASTM D-1946 24.0 "Hg Modified ASTM D-1946 NA 11A Lab Blank Modified ASTM D-1946 NA 12A LCS

CERTIFIED BY:

Sinda d. Fruman

DATE: 02/09/04

Laboratory Director

Certification numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP-AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified ASTM D-1946

Cambria Environmental Technology Workorder# 0401396B

Ten 6 Liter Summa Canister samples were received on January 29, 2004. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of up to 1.0 mL of sample. See the data sheets for the reporting limits for each compound.

Requirement	ASTM D-1946	ATL Modifications
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL (2.0 mL for He and H2) on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 30% RPD for detections > 5 X's the RL.

Receiving Notes

Samples VP1-12 and VP3-12 were received with significant vacuum remaining in the canisters. The discrepancy was noted in the Login email. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1-3 ID#: 0401396B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 3020203 Page of Collection: 1/23/04	
File Name: 3020203 Date of Collection: 1/23/04	
Dil. Factor: 1.46 "Date of Analysis: 2/2/04 10:37.	

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00015	0.00021
Carbon Dioxide	0.0015	4.7

SAMPLE NAME: VP1-3 dup

ID#: 0401396B-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Dil. Factor: 1,46 Date of Analysis: 2/2/04 10:59		
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.15	9.5
Methane	0.00015	0.00018
Carbon Dioxide	0.0015	4.4

SAMPLE NAME: VP1-9

ID#: 0401396B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

	20011
File Name: 3020205 Date of Collection: 41/23/04	
Dil. Factor: Date of Amilysis: 2/2/64 (1):19 AM	
Uil. Factor: Date of Analysis: 2204 1778 AM	

	Rpt. Limit	Amount (%)
Compound	(%)	
Oxygen	0.14	16
Methane	0.00014	0.00018
Carbon Dioxide	0.0014	2.6

SAMPLE NAME: VP1-12

ID#: 0401396B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

	Rpt. Limit	Amount (%)
Compound	(%)	
Oxygen	0.30	3.5
Methane	0.00030	0.0038
Carbon Dioxide	0.0030	6.0

SAMPLE NAME: VP2-3

ID#: 0401396B-05A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00015	Not Detected
Carbon Dioxide	0.0015	0.34

SAMPLE NAME: VP2-8

ID#: 0401396B-06A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

	Rpt. Limit	Amount (%)
Compound	(%)	
Oxygen	0.15	10
Methane	0.00015	Not Detected
Carbon Dioxide	0.0015	0.0050

SAMPLE NAME: VP2-8 Duplicate

ID#: 0401396B-06AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946 File Name: 3020209 Date of Collection: 1/26/64

Oil. Factors	1:52 Date of Ar	alysis: 2/2/04 12/54 PM
	Rpt. Limit	Amount
Compound	(%)	(%)
Oxygen	0.15	10

0.00015

0.0015

Not Detected

0.0050 -

Container Type: 6 Liter Summa Canister

Methane

Carbon Dioxide

SAMPLE NAME: VP2-12 ID#: 0401396B-07A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 3020210 Date of Collection: 1/26/04
Dil Factor: 2.12 Date of Analysis: 2(2)04.01:19 PM
Dil. Factor: 2:12 Date of Analysis: 2/2/04 01:19 PM

	Rpt. Limit	Amount	
Compound	(%)	(%)	
Oxygen	0.21	17	
Methane	0.00021	0.0011	
Carbon Dioxide	0.0021	0.69	

SAMPLE NAME: VP3-3

ID#: 0401396B-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Dill. Factor:		nalysis: 2/2/04 01:48 PM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.16	12
Methane	0.00016	Not Detected
Carbon Dioxide	0.0016	0.13

SAMPLE NAME: VP3-8

ID#: 0401396B-09A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Filé Name:		ollection: 1/26/04 nalysis = 2/2/04 02:09 PM :
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.16	9.5
Methane	0.00016	Not Detected
Carbon Dioxide	0.0016	0.86

SAMPLE NAME: VP3-12 ID#: 0401396B-10A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name 3020213 Date of Collection, 1/26/04
Dil. Factor: Date of Analysis: 2/2/04 02:29 PM
Dil Factor: Date of Analysis: 2/2/04 02:29 PM

	Rpt. Limit	Amount	
Compound	(%)	(%)	
Oxygen	0.67	14	
Methane	0.00067	Not Detected	
Carbon Dioxide	0.0067	1.0	

SAMPLE NAME: Lab Blank ID#: 0401396B-11A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: Dil. Factor:		Date of Collection: NA Date of Analysis, 2/2/04-08:00 AM	
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.10	Not Detected	
Methane	0.00010	Not Detected	
Carbon Dioxide	0.0010	Not Detected	

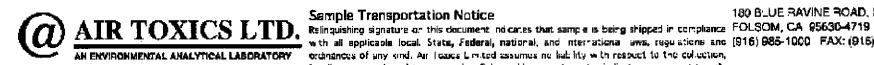
SAMPLE NAME: LCS

ID#: 0401396B-12A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 8020214	
File Name: 30202f4	Date of Collection: NA
Dil Factor:	
	Date of Analysis: 2/2/04 03:08 PM

Compound	%Recovery
Oxygen	99
Methane	100
Carbon Dioxide	100



CHAIN-OF-CUSTODY RECORD

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180 BLUE RAVINE ROAD, SUITE B.

Page i of i

Company Address Phone <u>-</u>	verson Sarah Owen Cambria 5900 Hollis St. Ste. A Co. 10 420 3350 By: Signature Sarah Co.	ity Emerguille State (A Zip 94608 AX 570 420 9170	Project info: P.O. # 9 - 0260 Project # 9 - 0260 Project Name Hayward	Turn Around Time: Normal Rush Specify Mw (70/4
Lab LD.	Field Sample I.D.	Date & Time Anai	yses Requested	Canister Pressure / Vacuum
AIO	VP1-3	1-23-04 11:20 TPHQ, BTE)	MIRE TAME DIPE.	李紫 二人 3.5%
024	VPI-3 dup	1-23-04 12 5 ETBE T		-25-4 25th
63A	Vp1-9	1-23-04 1334		-31 -2.5 2.01 K
0×44	VP1-12	1-23-04 2:53 0, (D)	& methane by	-295-16,25 16-5°48
OSA	VP2-3	1-23-04 3:30 ATS	MD-1946	-28,75 -3.6 3.0×98
40D	VP2-8	1-24-04 12:22		-30.5 -5 3524
AFO	VP2-12	1-26-04 1:07 FOR	ALL SAMPLES	-30 -12 11.04W
OKA.	VP3-3	1-26-04 3:45		-29 -3,5 4,0%
AP0	VP3-8	1-26-a4 Z:30		-29 -5 454
LOA	VP3-12	1-26-04 3:20		-295 -25.5 240 W
South	by (Signature) Date/Time 13:20 Code Gwe 1/27/64 by (Signature) Date/Time	Parefree By: (Signalure) Parefrine 1/29/00 Parefree By: (Signalure) Date/Time (Refer vec By: (Signalure) Date/Time	Notes: VP3-3, VP3-8, Condensation in	VP3-12 all had "sample tubing.
Re inquished B	By (Signature) Delettime	Pace ved By: (Gigneture) Determins	<u> </u>	· <i>ប</i>
Lab Use Only	Shipper Name Air E AIR 2035(5.3		Condition Custody See	



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- · Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0406010R1

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO:

Ms. Sarah Owen

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

Emeryville, CA 94608

Suite A

9-0260

Suite A

Emeryville, CA 94608

5900 Hollis Street

PHONE:

510-420-0700

FAX:

510-420-9170

P.O. #

9-0260 Hayward

DATE RECEIVED:

6/1/2004

PROJECT# CONTACT:

Taryn Badal

DATE COMPLETED:

6/21/2004

DATE REISSUED:

6/17/04

			RECEIPT
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.
01A	VP1@3	Modified TO-15	4.0 "Hg
02A	VP1@9	Modified TO-15	2.5 "Hg
03A	VP2@3	Modified TO-15	4.5 "Hg
04A	VP2@9	Modified TO-15	7.0 "Hg
04B	VP2@9	Modified TO-15	7.0 "Hg
05A	VP2@9 duplicate	Modified TO-15	4.5 "Hg
06A	VP2@12	Modified TO-15	5.5 "Hg
07A	VP3@3	Modified TO-15	5.5 "Hg
08A	VP3@9	Modified TO-15	1.5 "Hg
08AA	VP3@9 Duplicate	Modified TO-15	1.5 "Hg
09A	Trip Blank	Modified TO-15	29.0 "Hg
10A	Lab Blank	Modified TO-15	NA
11A	CCV	Modified TO-15	NA
12A	LCS	Modified TO-15	NA

CERTIFIED BY:

Sinda d. Fruman

06/21/04 DATE:

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP-AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified TO-15

Cambria Environmental Technology Workorder# 0406010R1

Eight 6 Liter Summa Canister and one 6 Liter Summa Canister (100% Certified) samples were received on June 01, 2004. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-14A/TO-15	ATL Modifications	
BFB acceptance criteria	CLP protocol (TO-15)	SW-846 protocol	
Concentration of IS spike	10 ppbv (TO-15)	25 ppbv	
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions	
Daily CCV	= 30% Difference</td <td colspan="2"><!--= 30% Difference with two allowed out up to </=40%.; fla and narrate outliers</p--></td>	= 30% Difference with two allowed out up to </=40%.; fla and narrate outliers</p	
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91, Vinyl Acetate: 43, 2-Butanone: 43, 4-Methyl-2-Pentanone: 43.	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106, Vinyl Acetate: 86, 2-Butanone: 72, 4-Methyl-2-Pentanone: 58.	
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request	
Sample Drying System	Nafion Dryer (TO-14A)	Multisorbent	
Sample Load Volume	400 mL (TO-14A)	Varied to 0.2 L.	
Blank Acceptance Criteria.	< 0.20 ppbv (TO-14A)	<rl< td=""></rl<>	
BFB Absolute Abundance Criteria (TO-14A)	Within 10% of that from the previous day.	CCV internal standard area counts are compared to ICAL, corrective action for > 40 % D.	
Initial Calibration	= 30 %RSD (TO-14A)</td <td colspan="2"><= 30 % RSD with 2 compounds allowed out to <= 40 % RSD.</td>	<= 30 % RSD with 2 compounds allowed out to <= 40 % RSD.	
IS Recoveries	Within 40% of mean over ICAL for blanks, and within 40 % of daily CCV for samples. (TO-15)	Within 40% of CCV recoveries for blank and samples.	

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Due to high-level target compounds, sample VP2@9 was analyzed twice. In the "A" fraction, the sample was diluted to bring the highest-level compounds within the calibration range. The "B" fraction is also reported by client request and may be reported with "E" flags indicating the compound exceeds the calibration range. Both runs and associated OC are reported.

DATA WAS REISSUED ON 06-21-2004 TO RECALCULATE THE TPHG VALUES ON SAMPLES 04A, 04B, 05A AND 06A. THE 2-PROPANOL WAS SUBTRACTED OUT OF THE TPHG CALCULATION PER CLIENT'S REQUEST.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated Peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1@3 ID#: 0406010R1-01A

File Name:	1,55 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Date of Collection: 5/26/04 Date of Analysis: 6/7/04 06:45 PM	
Dil. Factor:				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.78	Not Detected	2.5	Not Detected
Toluene	0.78	0.99	3.0	3.8
Ethyl Benzene	0.78	1.9	3.4	8.5
m,p-Xylene	0.78	11	3.4	48
o-Xylene	0.78	2.3	3.4	10
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
ert-Amyl methyl ether	3.1	Not Detected	13	Not Detected
lsopropyl ether	3.1	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.1	Not Detected	13	Not Detected
tert-Butyl alcohol	3.1	3.5	9.6	11
2-Propanol	3.1	14	7.7	34
TPH ref. to Gasoline (MW=100)	16	1800	64	7400
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		102		70-130
1,2-Dichloroethane-d4		104		70-130
4-Bromofluorobenzene		102		70-130

SAMPLE NAME: VP1@9 ID#: 0406010R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: "1060708	Date of Collection: 5/26/04
Dil. Factor 1.46	Date of Analysis: 6/7/04 07:46 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.73	Not Detected	2.4	Not Detected
Toluene	0.73	Not Detected	2.8	Not Detected
Ethyl Benzene	0.73	Not Detected	3.2	Not Detected
m,p-Xylene	0.73	Not Detected	3.2	Not Detected
o-Xylene	0.73	Not Detected	3.2	Not Detected
Methyl tert-butyl ether	2.9	Not Detected	11	Not Detected
tert-Amyl methyl ether	2.9	Not Detected	12	Not Detected
Isopropyl ether	2.9	Not Detected	12	Not Detected
Ethyl-tert-butyl ether	2.9	Not Detected	12	Not Detected
tert-Butyl alcohol	2.9	Not Detected	9.0	Not Detected
2-Propanol	2.9	520 E	7.3	1300 E
TPH ref. to Gasoline (MW=100)	15	3600	61	15000

E = Exceeds instrument calibration range.

••		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	101	70-130	
1,2-Dichloroethane-d4	104	70-130	
4-Bromofluorobenzene	100	70-130	

SAMPLE NAME: VP2@3 ID#: 0406010R1-03A

File/Name: Dil-Factor:	id60709 1:58		Date of Collection: Date of Analysis: 6	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.79	Not Detected	2.6	Not Detected
Toluene	0.79	0.81	3.0	3.1
Ethyl Benzene	0.79	Not Detected	3.5	Not Detected
m,p-Xylene	0.79	1.4	3.5	6.3
o-Xylene	0.79	Not Detected	3.5	Not Detected
Methyl tert-butyl ether	3.2	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.2	Not Detected	13	Not Detected
Isopropyl ether	3.2	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.2	Not Detected	13	Not Detected
tert-Butyl alcohol	3.2	11	9.7	34
2-Propanol	3.2	20	7.9	49
TPH ref. to Gasoline (MW=100)	16	2800	66	12000
Container Type: 6 Liter Summa Can	ister			
Surrogates		%Recovery		Method Limits
Toluene-d8		103		70-130
1,2-Dichloroethane-d4		106		70-130
4-Bromofluorobenzene		102		70-130

SAMPLE NAME: VP2@9 ID#: 0406010R1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

PH-AI INCOME	Peterof Collection - R/26/04
File Name 1060714	
	Data at 4 malaria, 2/0/D/200/90 Att
Dil Factor: 87.5	Date of Analysis: 6/8/04/09:30 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	44	Not Detected	140	Not Detected
Toluene	44	Not Detected	170	Not Detected
Ethyl Benzene	44	Not Detected	190	Not Detected
m,p-Xylene	4 4	Not Detected	190	Not Detected
o-Xylene	4 4	Not Detected	190	Not Detected
Methyl tert-butyl ether	180	Not Detected	640	Not Detected
tert-Amyl methyl ether	180	Not Detected	740	Not Detected
Isopropyl ether	180	Not Detected	740	Not Detected
Ethyl-tert-butyl ether	180	Not Detected	740	Not Detected
tert-Butyl alcohol	180	Not Detected	540	Not Detected
TPH ref. to Gasoline (MW=100)	880	3500	3600	14000

•		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	97	70-130

SAMPLE NAME: VP2@9

ID#: 0406010R1-04B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Date of Collection: 5729704
THE NAME OF THE PROPERTY OF TH
Dil. Factor: Date of Analysis: 6/7/04 09:17.PM
Dil. Factor: Date of Analysis: 6/7/04 09:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.88	Not Detected	2.8	Not Detected
Toluene	0.88	0.96	3.4	3.7
Ethyl Benzene	0.88	Not Detected	3.9	Not Detected
m,p-Xylene	0.88	Not Detected	3.9	Not Detected
o-Xylene	0.88	Not Detected	3.9	Not Detected
Methyl tert-butyl ether	3.5	Not Detected	13	Not Detected
tert-Amyl methyl ether	3.5	Not Detected	15	Not Detected
Isopropyl ether	3.5	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	3.5	Not Detected	15	Not Detected
tert-Butyl alcohol	3.5	15	11	46
TPH ref. to Gasoline (MW=100)	18	3600	73	15000

••••••••••••••••••••••••••••••••••••••		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

SAMPLE NAME: VP2@9 duplicate

ID#: 0406010R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 2050		
	41060718	Date of Collection: 5/26/04
Dit. Factor:		

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	40	Not Detected	130	Not Detected
Toluene	40	Not Detected	150	Not Detected
Ethyl Benzene	40	Not Detected	170	Not Detected
m,p-Xylene	40	Not Detected	170	Not Detected
o-Xylene	40	Not Detected	170	Not Detected
Methyl tert-butyl ether	160	Not Detected	580	Not Detected
tert-Amyl methyl ether	160	Not Detected	670	Not Detected
Isopropyl ether	160	Not Detected	670	Not Detected
Ethyl-tert-butyl ether	160	Not Detected	670	Not Detected
tert-Butyl alcohol	160	Not Detected	490	Not Detected
2-Propanol	160	22000 E	390	54000 E
TPH ref. to Gasoline (MW=100)	790	3800	3300	16000

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

		พยนเอน
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	97	70-130

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SAMPLE NAME: VP2@12 ID#: 0406010R1-06A

File Name:	1060720	北京的 教育	Date of Collection:	5/26/04
Dil. Factor:	1640	Andrew Control	Date of Analysis = 6	/8/04/01/48 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	820	Not Detected	2700	Not Detected
Toluene	820	Not Detected	3100	Not Detected
Ethyl Benzene	820	Not Detected	3600	Not Detected
m,p-Xylene	820	Not Detected	3600	Not Detected
o-Xylene	820	Not Detected	3600	Not Detected
Methyl tert-butyl ether	3300	Not Detected	12000	Not Detected
tert-Amyl methyl ether	3300	Not Detected	14000	Not Detected
Isopropyl ether	3300	Not Detected	14000	Not Detected
Ethyl-tert-butyl ether	3300	Not Detected	14000	Not Detected
tert-Butyl alcohol	3300	Not Detected	10000	Not Detected
2-Propanol	3300	900000 E	8200	2200000 E
TPH ref. to Gasoline (MW=100)	16000	Not Detected	68000	Not Detected
E = Exceeds instrument calibration ra	ange.			
Container Type: 6 Liter Summa Can	ister			
Surrogates		%Recovery		Method Limits
Toluene-d8		102		70-130

SAMPLE NAME: VP3@3

ID#: 0406010R1-07A

File Name:	i060717 1.64		Date of Collection Date of Analysis: 6	A CONTRACTOR OF THE CONTRACTOR
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.82	Not Detected	2.7	Not Detected
Toluene	0.82	Not Detected	3.1	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	1.2	3.6	5.1
o-Xylene	0.82	Not Detected	3.6	Not Detected
Methyl tert-butyl ether	3.3	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.3	Not Detected	14	Not Detected
Isopropyl ether	3.3	Not Detected	14	Not Detected
Ethyl-tert-butyl ether	3.3	Not Detected	14	Not Detected
tert-Butyl alcohol	3.3	Not Detected	10	Not Detected
2-Propanol	3.3	4.1	8.2	10
TPH ref. to Gasoline (MW=100)	16	2500	68	10000
Container Type: 6 Liter Summa Car	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		101		70-130
1,2-Dichloroethane-d4		104		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: VP3@9

ID#: 0406010R1-08A

Elle Name:	1060716		Date of Collection	5/26/04
Dil Factor:	1.41	一个时间	Date of Analysis: 6	18704 40:48 AM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.70	0.72	2.3	2.3
Toluene	0.70	4.8	2.7	18
Ethyl Benzene	0.70	Not Detected	3.1	Not Detected
m,p-Xylene	0.70	1.8	3.1	7.9
o-Xylene	0.70	Not Detected	3.1	Not Detected
Methyl tert-butyl ether	2.8	Not Detected	10	Not Detected
tert-Amyl methyl ether	2.8	Not Detected	12	Not Detected
sopropyl ether	2.8	Not Detected	12	Not Detected
Ethyl-tert-butyl ether	2.8	Not Detected	12	Not Detected
tert-Butyl alcohol	2.8	Not Detected	8.7	Not Detected
2-Propanol	2.8	7.8	7.0	19
TPH ref. to Gasoline (MW=100)	14	2800	59	12000
Container Type: 6 Liter Summa Car	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		102		70-130
1,2-Dichloroethane-d4		105		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: VP3@9 Duplicate

ID#: 0406010R1-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j060719 Date of Gollection: 5/26/04 Dil. Factor: 9.41 Date of Analysis: 6/8/04-12:56 PM
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Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.70	Not Detected	2.3	Not Detected
Toluene	0.70	4.7	2.7	18
Ethyl Benzene	0.70	Not Detected	3.1	Not Detected
m,p-Xylene	0.70	1.7	3.1	7.6
o-Xylene	0.70	Not Detected	3.1	Not Detected
Methyl tert-butyl ether	2.8	Not Detected	10	Not Detected
tert-Amyl methyl ether	2.8	Not Detected	12	Not Detected
Isopropyl ether	2.8	Not Detected	12	Not Detected
Ethyl-tert-butyl ether	2.8	Not Detected	12	Not Detected
tert-Butyl alcohol	2.8	Not Detected	8.7	Not Detected
2-Propanol	2.8	7.9	7.0	20
TPH ref. to Gasoline (MW=100)	14	2900	59	12000

3.		Method
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: Trip Blank ID#: 0406010R1-09A

File Name:	-1060715		Date of Collection:	5/26/04
Dil. Factor:	1.00	And Spalling States	Date of Analysis: 16	/8/04/10:09 AM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.3	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.5	Not Detected
Isopropyl ether	2.0	Not Detected	8.5	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.5	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	5.0	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	42	Not Detected
Container Type: 6 Liter Summa Can	ister (100% Certified)	•		
Surrogates	·	%Recovery		Method Limits
Toluene-d8		100		70-130
1,2-Dichloroethane-d4		107		70-130
4-Bromofluorobenzene		97		70-130

SAMPLE NAME: Lab Blank ID#: 0406010R1-10A

File Name:	3060706	and the second	Date of Collection:	
PRI FACE I	1:00 Rpt. Limit	Amount	Date of Analysis: 6 Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)_	(uG/m3)	(uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.3	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.5	Not Detected
Isopropyl ether	2.0	Not Detected	8.5	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.5	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	5.0	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	42	Not Detected
Container Type: NA - Not Applicable				
				Method
Surrogates		%Recovery		Limits
Toluene-d8		101		70-130
1,2-Dichloroethane-d4		106		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: CCV ID#: 0406010R1-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:		
Dil Factor:	1.00 Date of Analysis: 6/7/04	

Compound	%Recovery
Benzene	98
Toluene	108
Ethyl Benzene	107
m,p-Xylene	110
o-Xylene	111
Methyl tert-butyl ether	106
tert-Amyl methyl ether	99
Isopropyl ether	95
Ethyl-tert-butyl ether	98
tert-Butyl alcohol	98
2-Propanol	84
TPH ref. to Gasoline (MW=100)	Not Spiked

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	104	70-130

SAMPLE NAME: LCS

ID#: 0406010R1-12A

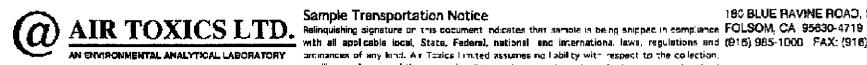
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1069704	Date of Collection: NA
Dil. Factor: 1.00	
	Date of Analysis: 6/7/04/04:34 PM

Compound	%Recovery
Benzene	112
Toluene	113
Ethyl Benzene	108
m,p-Xylene	109
o-Xylene	107
Methyl tert-butyl ether	116
tert-Amyl methyl ether	Not Spiked
Isopropyi ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	102
TPH ref. to Gasoline (MW=100)	Not Spiked

Container Type: NA - Not Applicable

		wethod
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130



CHAIN-OF-CUSTODY RECORD

with all applicable local, State, Federal, national and international laws, regulations and (915) 985-1000 FAX: (916) 985-1020 arcmandes of any kind. Air Taxica limited assumes no liability with respect to the collection. nandling or shipping of these samples. Relinquishing signature also and cates agreement to hold narmless, defend and indemnify Air Toxics Limited against any daim, demand, or action of any kind, related to the collection, handing, or shipping of samples, 0.0.7. Hotine (800) 467-4922

190 BLUE RAVINE ROAD, SUITE B

Page __ of __

Form 1958 rev. 0/3

Company Address . Phone	erson <u>Sarah Ower</u> <u>Cambria</u> 5900 Hollis St. Ste. 4 0 570 420 3350 F By: 85:21.00 Ca	ity Emeryville State AX 510 420 9		Project info: P.O. # 9-02-60 Project # 9-02-60 Project Name Hayward	A Norm □ Flush		
Lab I.D.	Field Sample I.D.	Date & Time	Analy	ses Requested	ndial	r Pressure / V Final	acuum Receipt
OLA	VPI 23	5/26/04 5:30	(TPH a B	TEX MTBE.	— 30		10 " My
ma.A.	VP/209	5/26/04 6:12	TAME,	DIPE, ETRE	>-30		2.5° 5
ለይል	VP 2 23	S/26/04 3:00	TRA	by TO 15/	> -30	~ £	- S1.P
CYA	VP229	5/26/04 3:20	211			-9 7	5"K
C6A	VP2299 duplicate	5/24/04 3:20	0, (3) .	mutatione S.C.C	<u>기, ১-30</u>	-8.5 4	15.K
OWA	VP2 2012	5/26/04 4:12	1	30 D - 1946	>-30	-8	55"4
OJA	VP3 23	5/26/04 11:20			>-30	-8 t	5.5°K
OR A	VP3 29	5/26/04 12:00	(FOR A	ILL SAMPLES/	>-30	-6.5	Sig
ο٩λ	Trip Blank	5/26/04 18:60			,		21.044
							- /
	y: (Signature) Date: Time to Carly Date: The 5/28/0:11	Received By: (Signature) Date/	The Hyslicy	Notes: Please E-fla	9 2 pro	panol	
	y: (Signature) Date/Fime	Permission bit is identified resen	Trie 56/1/04	, , , , , ,		•	
Reingulaned B	yr (Signature) Dare-Time	Received By (Signature) Date:	The 955				
Lab	Shipper Name Air B		y: Temp. (°C)		Seals Intect?	Work Orde	·
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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0410140B

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO:

Ms. Sarah Owen

COLEMI.

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

5900 Hollis Street

Suite A

Suite A

Emeryville, CA 94608

Emeryville, CA 94608

PHONE:

510-420-0700

P.O. #

FAX:

510-420-9170

PROJECT #

9-0260 Hayward Soil Gas

DATE RECEIVED:

10/07/2004

CONTACT:

Taryn Badal

DATE COMPLETED:

10/15/2004

			RECEIPT
FRACTION#	<u>NAME</u>	<u>TEST</u>	VAC./PRES.
01A	VP1@3	Modified ASTM D-1946	4.5 "Hg
02A(cancelled)	VP1@9	Modified ASTM D-1946	4.5 "Hg
03A	VP1@12	Modified ASTM D-1946	5.0 "Hg
04A	VP2@3	Modified ASTM D-1946	6.5 "Hg
05A	VP2@9	Modified ASTM D-1946	5.5 "Hg
06A	VP2@9 dup	Modified ASTM D-1946	5.5 "H g
07A	VP2@12	Modified ASTM D-1946	6.0 "Hg
07AA	VP2@12 Duplicate	Modified ASTM D-1946	6.0 "Hg
08A	VP1@9A	Modified ASTM D-1946	3.0 "Hg
09A	VP3@3	Modified ASTM D-1946	5.0 "Hg
10A	VP3@9	Modified ASTM D-1946	5.5 "Hg
11A	VP3@12	Modified ASTM D-1946	5.5 "Hg
12A	Lab Blank	Modified ASTM D-1946	NA
13A	LCS	Modified ASTM D-1946	NA

CERTIFIED BY:

Linda d. Fruman

DATE: $\frac{10/15/04}{10}$

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000. (800) 985-5955. FAX (916) 985-1020

LABORATORY NARRATIVE Modified ASTM D-1946

Cambria Environmental Technology Workorder# 0410140B

Eleven 6 Liter Summa Canister samples were received on October 07, 2004. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane, Oxygen and Carbon Dioxide in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample. See the data sheets for the reporting limits for each compound.

Requirement	ASTM D-1946	ATL Modifications
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 30% RPD for detections > 5 X's the RL.

Receiving Notes

The Chain of Custody (COC) information for sample VP2@9 dup did not match the entry on the sample tag with regard to sample identification. The discrepancy was noted in the Sample Receipt Confirmation email/fax and the information on the COC was used to process and report the sample.

Sample VP1@9 was cancelled per client's request.

The Chain of Custody was not relinquished properly. The discrepancy was noted in the Sample Receipt Confirmation email/fax.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1@3

ID#: 0410140B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 331	01304 Date of Collection 9/30/04 1.58 Date of Analysis: 10/13/04/11/41 AM

	Rpt. Limit	Amount (%)
Compound	(%)	
Oxygen	0.16	19
Methane	0.00016	Not Detected
Carbon Dioxide	0.0016	3.8

SAMPLE NAME: VP1@12

ID#: 0410140B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

$= -1000 \times 1000 \times 1000$	
File Name: 3101311	Page of Collections 10/1/04
	A
	The second section of the second sections of the second section of the sec
Dil. Factor:	Date of Applysis: 10/13/04 02:52 PM

	Rpt. Limit	Amount
Compound	(%)	(%)
Oxygen	0.16	16
Methane	0.00016	0.012
Carbon Dioxide	0.0016	4.5

SAMPLE NAME: VP2@3

ID#: 0410140B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 3101307: Date of Collection: 19/29/04 Dil. Factor: 1.71 Date of Analysis: 10/13/04 12:54 PM

	Rpt. Limit	Amount	
Compound	(%)	(%)	
Oxygen	0.17	20	
Methane	0.00017	Not Detected	
Carbon Dioxide	0.0017	2.0	

SAMPLE NAME: VP2@9

ID#: 0410140B-05A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: Dil. Factor:		llection: 9/30/04 alysis: 10/13/04/12:04/PM
Compound	Rpt. Limit	Amount (%)
Oxygen Methane	0.16 0.00016	19 0.00018
Carbon Dioxide	0.0016	0.23

SAMPLE NAME: VP2@9 dup

ID#: 0410140B-06A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00016	Not Detected
Carbon Dioxide	0.0016	0.24

SAMPLE NAME: VP2@12 ID#: 0410140B-07A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: DII Factor:		ollection: 10/1/04 nalysis: 10/13/04/03:40 PM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	7.4
Methane	0.00017	0.0041
Carbon Dioxide	0.0017	5.4

SAMPLE NAME: VP2@12 Duplicate

ID#: 0410140B-07AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: 3101314 Date of Collection: 10/1/04 Date of Analysis: 10/13/04 04:05 PM
--

Compound	Rpt. Limit	Amount (%)
Methane	0.00017	0.0042
Carbon Dioxide	0.0017	5.4

SAMPLE NAME: VP1@9A ID#: 0410140B-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Dil. Factor:		nalysis: 10/13/04 02:27 PM
Compound	Rpt: Limit (%)	Amount (%)
Oxygen	0.15	17
Methane	0.00015	Not Detected
Carbon Dioxide	0.0015	5.6

SAMPLE NAME: VP3@3

ID#: 0410140B-09A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00016	Not Detected
Carbon Dioxide	0.0016	1.2

SAMPLE NAME: VP3@9

ID#: 0410140B-10A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	3101309 Date of Co	Mestion: 9/29/04 Malysis: 10/13/04 02:05 PM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.16	18
Methane	0.00016	0.00018
Carbon Dioxide	0.0016	3.0

SAMPLE NAME: VP3@12

ID#: 0410140B-11A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	3101312 Date of Collection: 9/29/04 Date of Analysis: 10/13/04/93/15/PM

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00016	0.00055
Carbon Dioxide	0.0016	5.1

SAMPLE NAME: Lab Blank

ID#: 0410140B-12A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name: Dil. Factor:	C 19 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	pleotion. NA - nalysis: 10/13/04 11:10/AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.0010	Not Detected

Container Type: NA - Not Applicable

SAMPLE NAME: LCS

ID#: 0410140B-13A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

FIGURE CONTRACTOR CONT
File Name: 3161317 Date of Collection: NA
Dil. Factor: Date of Analysis: 10/13/04 06:14 PM
TOU DOLE OF THE PARTY OF THE PA

Compound	%Recovery
Oxygen	100
Methane	98
Carbon Dioxide	104

Container Type: NA - Not Applicable

4 Boxes sal



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance 180 BLUE RAVINE ROAD, SUITE B with all applicable local, State, Federal, netional, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to nold narmless. defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind.

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page / of 2

	related	to the collection	i, nandling. er sn	ipping of samples, D.O.T. Hotline (830) 467-4922				· ·
	men Sarah Owen			Project Info:	Ľ	Around me:	Lab Use Only Pressurized by	2
Company_	<u>Cambria</u> Email 5	FOWEN DE	mbria - emv	0 - 00 (.0	-	•		
Address 5900 Hollis St. Ste. A Energy ille State CA ZIP 94608			P.O.# 9-0260	# <u> </u>		Date: 0/8/04		
	0 420 3350 Fex 576 420			Project # 9-0260	☐ Rush		Pressurization Gas:	
Collected t	ay: (Signature) Sanah Cody Out			Project Name Hayward	- 6p	ecity	(N_z)	He .
						Canisi	ter Pressure/Va	acuum
Lab kD.	Field Sample I.D. (Location)	Date	Time	Analyses Requested		Initial	Final Receip	Mi Final
οlΑ	VP1 23	9/30/04	2:10	TPHS, BTEX, MTBE, TAME, DIFE	/ ERE 5	-28	-2.5 4.5H	
OZA	VPISP	9/30/04	3:300	Do Not Analyse UPI 29	ン .	- 28	-5 4.54	á '
_03A 🔧	VP 2 12	10/1/04	10:03			-37	-4.5 5-8H	
OHA	VP2 a 3	9/29/04	3:15	Oz, COz, merhane by		-24.5	-55 65H	
D\$A_	VP2 29	9/39/04	4:05	ATSMD 1946		-28	-4 5·5 ⁴ 4	<u> </u>
Ø64	VP2 29 dup	9/30/04				-38.5	-4 5.51	
OAA.	VPZala '	10/1/04	10:25	FOR ALL SAMPLES		~2 7	-5" 10 5 0"H	/}
CRA	Vel 29A	10/1/04	9:85	EXCEPT VPID9		-26 <u>5</u>	-5 3.6H	
OF IN MA		7 1						
40A 10	<u> † </u>				_			
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	a Carly Oven 10/5/04 18:00						was some	lad
	hed by: (signature) Date/Time	/ (y: (Aignature))	Date/Time	-	naed.	flow won	- Li o uce
	Kuirel 10,6.04 15:3		A fr	Mires 10/6/	to	<u> 42</u>	31	
Relinquist	hed by: (signature) Date/Time	Received b	y: (signature)	Deferime) + C IDI7/4 950				
Lab	Shipper Name Air Bli	#	Temp (°		eals lat	act?	· Work Order #	#
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AIR TOXICS LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this cocument indicates that sample is being shipped in complance 180 BLUE RAVINE ROAD, SUITE B with all applicable local, State, Federal, national, and international laws, regulations and ord nances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or (916) 985-1000 FAX (918) 985-1020 shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, hendling, or shipping of sumples D.O.T. Hoting (800) 487-4922

FOLSOM, CA 95630-4719

Page 2 of 2

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Contact Person Sarah Dwen Company Cambria Email Sowen Dombia - cnv. Address 5900 Holl:s St. Sk. Acity Emaryrille State A Zip 44608			Project Info:	Turn Around Time:			2m	
			P.O. # 9-0260	⊠ Normal	Date: 10.8/04			
			Project # 9 - 0260	ł				
by: (Signature)	<u> </u>		Project Name Hay war a	<u> </u>	<u> </u>	<u>/ </u>		
Field Sample LD. (Location)	Date	Time	Analyses Requested	Canis Initial		Receipt		
VP323	1 6 6		TPHq, BTEX, MTBE, TAN	• – /		I	5	
VP3D9	9/29/04	12:20	DIPE, ETBE, TBA	-295	-4	554		
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,			FOR ALL SAMPLES				, , , , , , , , , , , , , , , , , , ,	
			EXCEPT VAID 9				- :-	
hod by: (signature) Date/Time	Received b	y: (signature)	Date/Time Notes:	<u> </u>	L		<u> </u>	
h Cody Own 10/3/8	OD NINA	KUIRE	10.6.04 12:05					
Retinquished by: (signature) Date/Time Received by: (Agnature) Date/Time								
had by: (signature) Date/Time	Regulved b				,			
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988 48	5 7824 .	.	gond Yes: N	o Mone	04	1014	1)	
	reon Serah Dwen Cambria Email : 900 Holl:s St. Sk. City Emanyail 0 420 3350 Fax 5/0 by: Signature Small Cooky Field Sample I.D. (Location) VP3 23 VP3 29 VP3 29 VP3 20 12 Med by: (signature) Date/Time A Kui 2FL 10.6.04, 15: hed by: (signature) Date/Time A Kui 2FL 10.6.04, 15: hed by: (signature) Date/Time	Cambria Email Sowendown 700 Hollis St. Sk. Acity Emayville State At- 10 420 3350 Fax 5/0 420 9/70 by: (Signature) Sample I.D. (Location) Field Sample I.D. (Location) Date VP3 D 3 9 9/29/04 VP3 D 12 9/29/04 VP3 D 12 9/29/04 PRECEIVED BATE/Time Received by 18/100 Bate/Time Bate/Time Received by 18/100 Bate/Time Received by 18/100 Bate/Time Received by 18/100 Bate/Time Bate/Time Received by 18/100 Bate/Time Received by 18/100 Bate/Time Received by 18/100 Bate/Time Received by 18/100 Bate/Time B	Field Sample I.D. (Location) P3 2 3 9 9/29/04 11:36 VP3 2 3 9 9/29/04 12:20 VP3 2 1 2 9/29/04 1:30 VP3 2 1 2 9/29/04 1:30 Received by: (signature) Part	Cambria Email Source Decembria - Car. 1708 Holl:s St. St. City Emarcuille State At Zip 44468 1708 Holl:s St. St. City Emarcuille State At Zip 44468 1709 Holl:s St. St. City Foregravitle State At Zip 44468 1709 Project # 9-0260 1709 Project Name Hayward 1709 P	From Sarah Dwen Cambria Email Sowen Jambria - Cry 1908 Holl:S Sh. Sk. City Emergrille State A Zip 44408 19 420 3350 Fax \$10 YZe 9170 Project # 9-0260 Pr	Project Info: Turn Around Time: Proset Cambria Email 50wten 20mb in - cm/ 1708 Holl: 5 Sh. Sk. Tolly Emanyille State & Zip 44468 O 420 3350 Fax \$10 420 9170 Project # 9-0260 Project Info: Time: Prosst Time: Prosst Formal Cambridge # 9-0260 Project # 9-026	Project Info: Turn Around Email Sow on Down Project Info: Turn Around Email Sow on Down Project Proje	



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- · Work order Summary;
- · Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).

WORK ORDER #: 0410140A

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO:

Ms. Sarah Owen

Cambria Environmental Technology

Cambria Environmental Technology

RECEIPT VAC./PRES. 4.5 "Hg 4.5 "Hg 5.0 "Hg 6.5 "Hg 6.5 "Hg 5.5 "Hg 5.5 "Hg 6.0 "Hg 3.0 "Hg 5.0 "Hg 5.5 "Hg 5.5 "Hg NA NA NA NA

NA

5900 Hollis Street

5900 Hollis Street

Suite A

Suite A

Emeryville, CA 94608

Emeryville, CA 94608

PHONE:

510-420-0700

P.O. #

FAX:

13A

510-420-9170

PROJECT#

9-0260 Hayward Soil Gas

DATE RECEIVED:
DATE COMPLETED:

10/07/2004 10/20/2004

CCV

CONTACT:

Taryn Badal

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	VP1@3	Modified TO-15
02A(cancelled)	VP1@9	Modified TO-15
03A	VP1@12	Modified TO-15
04A	VP2@3	Modified TO-15
04AA	VP2@3 Duplicate	Modified TO-15
05A	VP2@9	Modified TO-15
06A	VP2@9 dup	Modified TO-15
07A	VP2@12	Modified TO-15
08A	VP1@9A	Modified TO-15
09A	VP3@3	Modified TO-15
10A	VP3@9	Modified TO-15
11A	VP3@12	Modified TO-15
12A	Lab Blank	Modified TO-15
12B	Lab Blank	Modified TO-15
12C	Lab Blank	Modified TO-15
12D	Lab Blank	Modified TO-15

Continued on next page

Modified TO-15

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0410140A

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO:

Ms. Sarah Owen

Cambria Environmental Technology

v

Cambria Environmental Technology

5900 Hollis Street

Emeryville, CA 94608

5900 Hollis Street Suite A

Suite A

Suite A

Emeryville, CA 94608

PHONE:

510-420-0700

P.O. #

FAX:

510-420-9170

PROJECT #

9-0260 Hayward Soil Gas

DATE RECEIVED:

10/07/2004

CONTACT:

Taryn Badal

DATE COMPLETED:

10/20/2004

FRACTION # <u>NAME</u> 13B CCV 13C **CCV** 13D CCV14A LCS 14B LCS 14C LCS 14D LCS

	RECEIPT
TEST	VAC./PRES.
Modified TO-15	NA

CERTIFIED BY:

Simal S. Fruman

DATE: 10/20/04

Laboratory Director

Certification numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE Modified TO-15

Cambria Environmental Technology Workorder# 0410140A

Eleven 6 Liter Summa Canister samples were received on October 07, 2004. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-15	ATL Modifications		
BFB acceptance criteria	CLP protocol (TO-15)	SW-846 protocol		
Concentration of IS spike	10 ppbv (TO-15)	25 ppbv		
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions		
Daily CCV	= 30% Difference</td <td><!--= 30% Difference with two allowed out up to </=40%.;</p--> flag and narrate outliers</td>	= 30% Difference with two allowed out up to </=40%.;</p flag and narrate outliers		
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91, Vinyl Acetate: 43, 2-Butanone: 43, 4-Methyl-2-Pentanone: 43.	Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene 106, Vinyl Acetate: 86, 2-Butanone: 72, 4-Methyl-2-Pentanone: 58.		
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request		
Sample Drying System	Nafion Dryer (TO-14A)	Multisorbent		
Sample Load Volume	400 mL (TO-14A)	Varied to 0.2 L.		
Blank Acceptance Criteria.	< 0.20 ppbv (TO-14A)	< RL		
BFB Absolute Abundance Criteria (TO-14A)	Within 10% of that from the previous day.	CCV internal standard area counts are compared to ICAL, corrective action for > 40 % D.		
Initial Calibration	= 30 %RSD<br (TO-14A)	<= 30 % RSD with 2 compounds allowed out to <= 40 % RSD.		
IS Recoveries	Within 40% of mean over ICAL for blanks, and within 40 % of daily CCV for samples. (TO-15)	Within 40% of CCV recoveries for blank and samples.		

	Method Detection Limit Follow 40CFR Pt.1: App. B	(statistical MDL less than the LOQ). In a few instances analyte concentration in the spiked replicate was 10X the MDL. A list of these compounds is available. There is no
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Receiving Notes

The Chain of Custody (COC) information for sample VP2@9 dup did not match the entry on the sample tag with regard to sample identification. The discrepancy was noted in the Sample Receipt Confirmation email/fax and the information on the COC was used to process and report the sample.

Sample VP1@9 was cancelled per client's request.

The Chain of Custody was not relinquished properly. The discrepancy was noted in the Sample Receipt Confirmation email/fax.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

The chromatographic pattern present in all samples does not resemble that which is typically attributed to TpH. The value was quantified as TpH per client request.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated Peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1@3

ID#: 0410140A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	(프로마이트) - 프로프 레이터 네티스 프로그램 (Proposition of the Proposition of the Pr	ollection: '9/30/04 nalysis: 10/11/04 03:40 PM
the pe		

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.6	Not Detected	5.0	Not Detected
Toluene	1.6	Not Detected	6.0	Not Detected
Ethyl Benzene	1.6	Not Detected	6.9	Not Detected
m,p-Xylene	1.6	Not Detected	6.9	Not Detected
o-Xylene	1.6	Not Detected	6.9	Not Detected
Methyl tert-butyl ether	6.3	Not Detected	23	Not Detected
tert-Amyl methyl ether	6.3	Not Detected	26	Not Detected
Isopropyl ether	6.3	Not Detected	26	Not Detected
Ethyl-tert-butyl ether	6.3	Not Detected	26	Not Detected
tert-Butyl alcohol	6.3	Not Detected	19	Not Detected
2-Propanol	6.3	780 E	16	1900 E
TPH ref. to Gasoline (MW=100)	32	1400	130	5700

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

SAMPLE NAME: VP1@12 ID#: 0410140A-03A

File Name: Dil. Factor:	101220 1070		Date of Collection: Date of Analysis:	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	540	Not Detected	1700	Not Detected
Toluene	540	Not Detected	2000	Not Detected
Ethyl Benzene	540	Not Detected	2300	Not Detected
m,p-Xylene	540	Not Detected	2300	Not Detected
o-Xylene	540	Not Detected	2300	Not Detected
Methyl tert-butyl ether	2100	Not Detected	7700	Not Detected
tert-Amyl methyl ether	2100	Not Detected	8900	Not Detected
Isopropyl ether	2100	Not Detected	8900	Not Detected
Ethyl-tert-butyl ether	2100	Not Detected	8900	Not Detected
tert-Butyl alcohol	2100	Not Detected	6500	Not Detected
2-Propanol	2100	270000 E	5200	660000 E
TPH ref. to Gasoline (MW=100)	11000	110000	44000	460000
E = Exceeds instrument calibration ra	ange.			
Container Type: 6 Liter Summa Ca	nister			
		n/ m		Method
Surrogates		%Recovery		Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		104		70-130
4-Bromofluorobenzene		103		70-130

SAMPLE NAME: VP2@3

ID#: 0410140A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

|--|

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.4	Not Detected	4.4	Not Detected
Toluene	1.4	2.0	5.2	7.6
Ethyl Benzene	1.4	Not Detected	5.9	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	1.4	Not Detected	5.9	Not Detected
Methyl tert-butyl ether	5.5	Not Detected	20	Not Detected
tert-Amyl methyl ether	5.5	Not Detected	23	Not Detected
Isopropyl ether	5.5	Not Detected	23	Not Detected
Ethyl-tert-butyl ether	5.5	Not Detected	23	Not Detected
tert-Butyl alcohol	5.5	7.8	17	24
2-Propanol	5.5	770 E	13	1900 E
TPH ref. to Gasoline (MW=100)	27	1000	110	4100

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

•		Method
Surrogates	%Recovery	Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	100	70-130

SAMPLE NAME: VP2@3 Duplicate

ID#: 0410140A-04AA

File Name: Dil Factor:			Date of Collection: Date of Analysis: "	ebase in the comment
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.4	Not Detected	4.4	Not Detected
Toluene	1.4	2.2	5.2	8.2
Ethyl Benzene	1.4	Not Detected	5.9	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	1.4	Not Detected	5.9	Not Detected
Methyl tert-butyl ether	5.5	Not Detected	20	Not Detected
tert-Amyl methyl ether	5.5	Not Detected	23	Not Detected
Isopropyl ether	5.5	Not Detected	23	Not Detected
Ethyl-tert-butyl ether	5.5	Not Detected	23	Not Detected
tert-Butyl alcohol	5.5	7.8	17	24
2-Propanol	5.5	830 E	13	2000 E
TPH ref. to Gasoline (MW=100)	27	1100	110	4400
E = Exceeds instrument calibration ra	nge.			
Container Type: 6 Liter Summa Car	nister			Method
Surrogates		%Recovery		Limits
Toluene-d8		96		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		96		70-130

SAMPLE NAME: VP2@9

ID#: 0410140A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	1101113	Date of Collection: 9/30/04
Dil. Factor:		Date of Analysis: 10/12/04 01:17 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.1	Not Detected	3.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
2-Propanol	4.4	820 E	11	2000 E
TPH ref. to Gasoline (MW=100)	22	1600	90	6400

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

SAMPLE NAME: VP2@9 dup

ID#: 0410140A-06A

File Name:	1101215		Bate of Collection: Date of Analysis	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	4.1	Not Detected	13	Not Detected
Toluene	4.1	Not Detected	15	Not Detected
Ethyl Benzene	4.1	Not Detected	18	Not Detected
m,p-Xylene	4.1	Not Detected	18	Not Detected
o-Xylene	4.1	Not Detected	18	Not Detected
Methyl tert-butyl ether	16	Not Detected	59	Not Detected
tert-Amyl methyl ether	16	Not Detected	68	Not Detected
Isopropyl ether	16	Not Detected	68	Not Detected
Ethyl-tert-butyl ether	16	Not Detected	68	Not Detected
tert-Butyl alcohol	16	Not Detected	50	Not Detected
2-Propanol	16	830	40	2000
TPH ref. to Gasoline (MW=100)	82	1500	340	6200
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		105		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: VP2@12

ID#: 0410140A-07A

File Name:	1101217	and the second second	Date of Collection:	10/1/04
DII. Factor:	.4340	.1340		0/13/04 01:56 AM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	670	Not Detected	2100	Not Detected
Toluene	670	Not Detected	2500	Not Detected
Ethyl Benzene	670	Not Detected	2900	Not Detected
m,p-Xylene	670	Not Detected	2900	Not Detected
o-Xylene	670	Not Detected	2900	Not Detected
Methyl tert-butyl ether	2700	Not Detected	9700	Not Detected
tert-Amyl methyl ether	2700	Not Detected	11000	Not Detected
Isopropyl ether	2700	Not Detected	11000	Not Detected
Ethyl-tert-butyl ether	2700	Not Detected	11000	Not Detected
tert-Butyl alcohol	2700	Not Detected	8100	Not Detected
2-Propanol	2700	170000	6600	430000
TPH ref. to Gasoline (MW=100)	13000	88000	55000	360000
Container Type: 6 Liter Summa Ca	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		105		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: VP1@9A

ID#: 0410140A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: (**) Dil Factor:	1101218 14.9	Dahle Property 7 April 2	Date of Collection: Date of Analysis:	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	7.4	Not Detected	24	Not Detected
Toluene	7.4	Not Detected	28	Not Detected
Ethyl Benzene	7.4	Not Detected	32	Not Detected
m,p-Xylene	7.4	Not Detected	32	Not Detected
o-Xylene	7.4	Not Detected	32	Not Detected
Methyl tert-butyl ether	30	Not Detected	110	Not Detected
tert-Amyl methyl ether	30	Not Detected	120	Not Detected
Isopropyl ether	30	Not Detected	120	Not Detected
Ethyl-tert-butyl ether	30	Not Detected	120	Not Detected
tert-Butyl alcohol	30	Not Detected	90	Not Detected
2-Propanol	30	5200 E	73	13000 E
TPH ref. to Gasoline (MW=100)	150	3500	610	14000
E = Exceeds instrument calibration ra	ange.			
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		104		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: VP3@3

ID#: 0410140A-09A

File Name:	1101310	process as a second	Date of Collection:	9/29/04
Dil, Factor	01.61 3 manual m	minimización de la color Composito de la color de la	Date of Analysis:	0/13/04 04:33 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.80	Not Detected	2.6	Not Detected
Toluene	0.80	7.1	3.0	27
Ethyl Benzene	0.80	Not Detected	3.5	Not Detected
m,p-Xylene	0.80	1.5	3.5	6.4
o-Xylene	0.80	Not Detected	3.5	Not Detected
Methyl tert-butyl ether	3.2	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.2	Not Detected	13	Not Detected
Isopropyl ether	3.2	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.2	Not Detected	13	Not Detected
tert-Butyl alcohol	3.2	Not Detected	9.8	Not Detected
2-Propanol	3.2	54	7.9	130
TPH ref. to Gasoline (MW=100)	16	1200	66	4900
Container Type: 6 Liter Summa Ca	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		104		70-130
4-Bromofluorobenzene		99		70-130

SAMPLE NAME: VP3@9

ID#: 0410140A-10A

File Name: Dil. Factor:	1101314 : ***. (1.64 : ***.	Control of the Contro	Date of Collection: Date of Analysis): 1	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.82	Not Detected	2.6	Not Detected
Toluene	0.82	3.9	3.1	15
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	1.1	3.6	5.0
o-Xylene	0.82	Not Detected	3.6	Not Detected
Methyl tert-butyl ether	3.3	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.3	Not Detected	14	Not Detected
sopropyl ether	3.3	Not Detected	14	Not Detected
Ethyl-tert-butyl ether	3.3	Not Detected	14	Not Detected
tert-Butyl alcohol	3.3	Not Detected	9.9	Not Detected
2-Propanol	3.3	15	8.1	38
TPH ref. to Gasoline (MW=100)	16	2000	67	8000
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		96		70-130
1,2-Dichloroethane-d4		103		70-130
4-Bromofluorobenzene		101		70-130

SAMPLE NAME: VP3@12

ID#: 0410140A-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	41	49	130	160
Toluene	41	Not Detected	150	Not Detected
Ethyl Benzene	41	Not Detected	180	Not Detected
m,p-Xylene	41	Not Detected	180	Not Detected
o-Xylene	41	Not Detected	180	Not Detected
Methyl tert-butyl ether	160	Not Detected	590	Not Detected
tert-Amyl methyl ether	160	Not Detected	680	Not Detected
Isopropyl ether	160	Not Detected	680	Not Detected
Ethyl-tert-butyl ether	160	Not Detected	680	Not Detected
tert-Butyl alcohol	160	Not Detected	500	Not Detected
2-Propanol	160	>77000 S	400	>190000 S
TPH ref. to Gasoline (MW=100)	820	180000	3400	740000

S = Saturated peak; data reported as estimated.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	100	70-130

SAMPLE NAME: Lab Blank

ID#: 0410140A-12A

File Name:	1101106		Date of Collection:	NA .
Dil. Factor:	1:00		Date of Analysis:	10/11/04 01:50 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicab	le			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		103		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: Lab Blank

ID#: 0410140A-12B

File Name: , , , , , , , , , , , , , , , , , , ,	1101205 1.00		Date of Collection: Date of Analysis:	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicab	le			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		98		70-130

SAMPLE NAME: Lab Blank

ID#: 0410140A-12C

File Name:	1101307		Date of Collection.	NA
Dil. Factor:	1.00		Date of Analysis.	0/13/04 01:52 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicab	le			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichioroethane-d4		102		70-130
4-Bromofluorobenzene		100		70-130

SAMPLE NAME: Lab Blank

ID#: 0410140A-12D

File Name:	1101407a .		Date of Collection:	AÑ.
Dil. Factor:	1.00	erakin da saman da s Saman da saman da sa	Date of Analysis: 10/14/04 02:55 PA	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicabl	e			
Surrogates		%Rесочегу		Method Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		99		70-130

SAMPLE NAME: CCV

ID#: 0410140A-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	Date of Collection: NA Section 194
File Name: 101102	
Dil. Factor: 1:00	Date of Analysis: 10/14/04 08:46 AM

Compound	%Recovery
Benzene	101
Toluene	101
Ethyl Benzene	105
m,p-Xylene	114
o-Xylene	107
Methyl tert-butyl ether	88
tert-Amyl methyl ether	128
Isopropyl ether	108
Ethyl-tert-butyl ether	115
tert-Butyl alcohol	108
2-Propanol	92
TPH ref. to Gasoline (MW=100)	Not Spiked

, , , , , , , , , , , , , , , , , , ,		Method Limits
Surrogates	%Recovery	
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

SAMPLE NAME: CCV

ID#: 0410140A-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Date of Collection: NA	
Dil. Factor: 1.00 Date of Analysis: 10/12/04 09:2	5 AM
	All property and the second

Compound	%Recovery
Benzene	104
Toluene	103
Ethyl Benzene	107
m,p-Xylene	114
o-Xylene	106
Methyl tert-butyl ether	88
tert-Amyl methyl ether	126
isopropyl ether	109
Ethyl-tert-butyl ether	117
tert-Butyl alcohol	110
2-Propanol	93
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	101	70-130

SAMPLE NAME: CCV

ID#: 0410140A-13C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: if01302 Dz	ite of Collection: NA
Dil Factor: 1.00	ite of Analysis: 10/13/04 09:59 AM

Compound	%Recovery
Benzene	101
Toluene	102
Ethyl Benzene	105
m,p-Xylene	112
o-Xylene	106
Methyl tert-butyl ether	85
tert-Amyl methyl ether	125
Isopropyl ether	107
Ethyl-tert-butyl ether	114
tert-Butyl alcohol	106
2-Propanol	95
TPH ref. to Gasoline (MW=100)	Not Spiked

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	105	70-130

SAMPLE NAME: CCV

ID#: 0410140A-13D

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name. 1001402 Date of Collection: NA	
The England Control of the Control o	

Compound	%Recovery
Benzene	104
Toluene	104
Ethyl Benzene	107
m,p-Xylene	114
o-Xylene	108
Methyl tert-butyl ether	104
tert-Arnyl methyl ether	127
Isopropyl ether	108
Ethyl-tert-butyl ether	123
tert-Butyl alcohol	115
2-Propanol	98
TPH ref. to Gasoline (MW=100)	Not Spiked

		wetnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	102	70-130	
4-Bromofluorobenzene	102	70-130	

SAMPLE NAME: LCS ID#: 0410140A-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 101104 Date of Collection: NA	
Dil. Factor: 100 Bate of Analysis: 10/1	
Dil. Factor: 1.00 Bate of Analysis: 10/11	

Compound	%Recovery
Benzene	102
Toluene	92
Ethyl Benzene	95
m,p-Xylene	105
o-Xylene	98
Methyl tert-butyl ether	83
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	88
TPH ref. to Gasoline (MW=100)	Not Spiked

**************************************		Method Limits
Surrogates	%Recovery	
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130

SAMPLE NAME: LCS

ID#: 0410140A-14B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 101203 - Date of Gollection: NA
File Name: 101203 . Date of Collection: NA
File Name: 1101203 : Date of Collection: NA
Dil. Factor: Date of Analysis: 10/12/04 10:18 AM
Dil. Factor: J.00 Date of Analysis: 10/12/04 10:18 AM
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Compound	%Recovery
Benzene	101
Toluene	91
Ethyl Benzene	93
m,p-Xylene	103
o-Xylene	98
Methyl tert-butyl ether	79
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	84
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	104	70-130

SAMPLE NAME: LCS

ID#: 0410140A-14C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 110 (304 Bate of Gollection: NA	
Dill. Factor: Date of Analysis: 10/13/04/11:26 A	

Compound	%Recovery
Benzene	103
Toluene	93
Ethyl Benzene	94
m,p-Xylene	105
o-Xylene	97
Methyl tert-butyl ether	83
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	87
TPH ref. to Gasoline (MW=100)	Not Spîked

		Method Limits
Surrogates	%Recovery	
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	102	70-130

SAMPLE NAME: LCS

ID#: 0410140A-14D

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1101405	Date of Collection; NA
DIL Factor: 1.00	Date of Analysis: 10/14/04 12:51 PM

Compound	%Recovery
Benzene	110
Toluene	100
Ethyl Benzene	99
m,p-Xylene	111
o-Xylene	103
Methyl tert-butyl ether	116
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	96
TPH ref. to Gasoline (MW=100)	Not Spiked

_		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	103	70-130	



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This electronic report includes the following:

- · Work order Summary;
- · Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).



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This electronic report includes the following:

- · Work order Summary;
- · Laboratory Narrative;
- · Results; and
- · Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0412548

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO: Ms. Sarah Owen

Cambria Environmental Technology

Cambria Environmental Technology

5900 Hollis Street

5900 Hollis Street

Suite A

Suite A

Emeryville, CA 94608

Emeryville, CA 94608

PHONE:

510-420-0700

P.O. #

FAX:

510-420-9170

PROJECT #

9-0260 Hayward

DATE RECEIVED:

12/29/2004

CONTACT:

Taryn Badal

DATE COMPLETED: 01/12/2005

			RECEIPT
FRACTION #	NAME:	<u>TEST</u>	VAC./PRES.
01A	VP1@3	Modified TO-15	4.5 "Hg
02A	VP1@3 OLD	Modified TO-15	5.0 "Hg
03A	VP1@9	Modified TO-15	3.5 "Hg
04A	VPI@12	Modified TO-15	9.0 "Hg
05A	VP2@3	Modified TO-15	4.0 "Hg
06A	VP2@3 OLD	Modified TO-15	3.5 "Hg
07A	VP2@9	Modified TO-15	6.0 "H g
08A	VP2@9 DUP	Modified TO-15	3.5 "Hg
09A	VP2@12	Modified TO-15	4.5 "Hg
10A	VP3@3	Modified TO-15	0.5 "Hg
11A	VP3@9	Modified TO-15	4.0 "Hg
12A	VP3@12	Modified TO-15	2.0 "Hg
12AA	VP3@12 Duplicate	Modified TO-15	2.0 "Hg
13A	Trip Blank	Modified TO-15	29.0 "Hg
14A	Lab Blank	Modified TO-15	NA
14B	Lab Blank	Modified TO-15	NA
14C	Lab Blank	Modified TO-15	NA

Continued on next page

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0412548

Work Order Summary

CLIENT:

Mr. Bob Foss

BILL TO:

Ms. Sarah Owen

CHIDITI.

Cambria Environmental Technology

LE 10: Ms. Salan Ov

Cambria Environmental Technology 5900 Hollis Street

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Suite A

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Emeryville, CA 94608

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PHONE:

510-420-0700

P.O. #

FAX:

510-420-9170

PROJECT #

9-0260 Hayward

DATE RECEIVED:

12/29/2004

CONTACT:

Taryn Badal

DATE COMPLETED:

01/12/2005

		RECEIPT
<u>NAME</u>	<u>TEST</u>	VAC./PRES.
Lab Blank	Modified TO-15	NA
CCV	Modified TO-15	NA
LCS	Modified TO-15	NA
	Lab Blank CCV CCV CCV CCV LCS LCS LCS	Lab Blank CCV Modified TO-15 LCS Modified TO-15 LCS Modified TO-15 LCS Modified TO-15 Modified TO-15

CERTIFIED BY:

Linda d. Truman

DATE: $\frac{01/12/05}{1}$

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE Modified TO-15

Cambria Environmental Technology Workorder# 0412548

Twelve 6 Liter Summa Canister and One 6 Liter Summa Canister (100% Certified) samples were received on December 29, 2004. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-15	ATL Modifications
BFB acceptance criteria	CLP protocol (TO-15)	SW-846 protocol
Concentration of IS spike	10 ppbv (TO-15)	25 ppbv
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	= 30% Difference</td <td><!--= 30% Difference with two allowed out up to </=40%.;<br-->flag and narrate outliers</td>	= 30% Difference with two allowed out up to </=40%.;<br flag and narrate outliers
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91, Vinyl Acetate: 43, 2-Butanone: 43, 4-Methyl-2-Pentanone: 43.	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106, Vinyl Acetate: 86, 2-Butanone: 72, 4-Methyl-2-Pentanone: 58.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Sample Drying System	Nafion Dryer (TO-14A)	Multisorbent
Sample Load Volume	400 mL (TO-14A)	Varied to 0.2 L.
Blank Acceptance Criteria.	< 0.20 ppbv (TO-14A)	<rl< td=""></rl<>
BFB Absolute Abundance Criteria (TO-14A)	Within 10% of that from the previous day.	CCV internal standard area counts are compared to ICAL, corrective action for > 40 % D.
Initial Calibration	= 30 %RSD (TO-14A)</td <td><!--= 30 % RSD with 2 compounds allowed out to </= 40 % RSD.</p--></td>	= 30 % RSD with 2 compounds allowed out to </= 40 % RSD.</p
IS Recoveries	Within 40% of mean over ICAL for blanks, and within 40 % of daily CCV for samples. (TO-15)	Within 40% of CCV recoveries for blank and samples.

Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of
		the spiked replicate may have exceeded 10X the calculated MDL in some cases. A list of these compounds is available.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Dilution was performed on samples VP3@12 and VP3@12 Duplicate due to the presence of high level non-target species.

Dilution was performed on sample VP3@3 OLD due to the presence of high levels of 2-Propanol.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated Peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

SAMPLE NAME: VP1@3

ID#: 0412548-01A

File Name: Dil: Factor:	1123024 1:58		Date of Collection: 12/21/04* Date of Analysis: 12/31/04 12:09 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.79	Not Detected	2.5	Not Detected
Toluene	0.79	1.1	3.0	4.1
Ethyl Benzene	0.79	Not Detected	3.4	Not Detected
m,p-Xylene	0.79	1.9	3.4	8.2
o-Xylene	0.79	0.83	3.4	3.6
Methyl tert-butyl ether	3.2	Not Detected	11	Not Detected
tert-Amyl methyl ether	3.2	Not Detected	13	Not Detected
Isopropyl ether	3.2	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.2	Not Detected	13	Not Detected
tert-Butyl alcohol	3.2	Not Detected	9.6	Not Detected
2-Propanol	3.2	Not Detected	7.8	Not Detected
TPH ref. to Gasoline (MW=100)	16	390	65	1600

Surrogates	%Recovery	Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	117	70-130

SAMPLE NAME: VP1@3 OLD

ID#: 0412548-02A

File Name:	i010410		Date of Collection:	12/21/04
Dil. Factor	161		Jate of Analysis: 1	/4/05 03:36 PM
Compound	Rpt. Ĺimit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.80	Not Detected	2.6	Not Detected
Toluene	0.80	Not Detected	3.0	Not Detected
Ethyl Benzene	0.80	Not Detected	3.5	Not Detected
m,p-Xylene	0.80	0.90	3.5	3.9
o-Xylene	0.80	Not Detected	3.5	Not Detected
Methyl tert-butyl ether	3.2	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.2	Not Detected	13	Not Detected
Isopropyl ether	3.2	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.2	Not Detected	13	Not Detected
tert-Butyl alcohol	3.2	Not Detected	9.8	Not Detected
2-Propanol	3.2	1600 E	7.9	3900 E
TPH ref. to Gasoline (MW=100)	16	470	66	1900
E = Exceeds instrument calibration	range.			-
Container Type: 6 Liter Summa Car	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		95		70-130
1,2-Dichloroethane-d4		101		70-130
4-Bromofluorobenzene		122		70-130

SAMPLE NAME: VP1@9

ID#: 0412548-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.76	Not Detected	2.4	Not Detected
Toluene	0.76	Not Detected	2.9	Not Detected
Ethyl Benzene	0.76	Not Detected	3.3	Not Detected
m,p-Xylene	0.76	1.1	3.3	4.9
o-Xylene	0.76	Not Detected	3.3	Not Detected
Methyl tert-butyl ether	3.0	Not Detected	11	Not Detected
tert-Amyl methyl ether	3.0	Not Detected	13	Not Detected
Isopropyl ether	3.0	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.0	Not Detected	13	Not Detected
tert-Butyl alcohol	3.0	Not Detected	9.2	Not Detected
2-Propanol	3.0	Not Detected	7.5	Not Detected
TPH ref. to Gasoline (MW=100)	15	930	62	3800

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	101 .	70-130
4-Bromofluorobenzene	127	70-130

SAMPLE NAME: VP1@12

ID#: 0412548-04A

File Name:	=1010408 · .		Date of Collection:	
Dil. Factor:	191	Maria Maria	Date of Analysis: 1	/4/05/02:19 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.96	Not Detected	3.0	Not Detected
Toluene	0.96	1.5	3.6	5.6
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	1.3	4.1	5.7
o-Xylene	0.96	Not Detected	4.1	Not Detected
Methyl tert-butyl ether	3.8	Not Detected	14	Not Detected
tert-Amyl methyl ether	3.8	Not Detected	16	Not Detected
Isopropyl ether	3.8	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	3.8	Not Detected	16	Not Detected
tert-Butyl alcohol	3.8	Not Detected	12	Not Detected
2-Propanol	3.8	69	9.4	170
TPH ref. to Gasoline (MW=100)	19	400	78	1600
Container Type: 6 Liter Summa Cai	nister			
				Method
Surrogates		%Recovery		Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		125		70-130

SAMPLE NAME: VP2@3

ID#: 0412548-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.78	Not Detected	2.5	Not Detected
Toluene	0.78	Not Detected	2.9	Not Detected
Ethyl Benzene	0.78	Not Detected	3.4	Not Detected
m,p-Xylene	0.78	Not Detected	3.4	Not Detected
o-Xylene	0.78	Not Detected	3.4	Not Detected
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
tert-Amyl methyl ether	3.1	Not Detected	13	Not Detected
Isopropyl ether	3.1	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.1	Not Detected	13	Not Detected
tert-Butyl alcohol	3.1	Not Detected	9.4	Not Detected
2-Propanol	3.1	Not Detected	7.6	Not Detected
TPH ref. to Gasoline (MW=100)	16	300	63	1200

Container Type: 6 Liter Summa Canister

		Limits	
Surrogates	%Recovery		
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	93	70-130	
4-Bromofluorobenzene	107	70-130	

SAMPLE NAME: VP2@3 OLD

ID#: 0412548-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:: Dil. Factor:	d010409 4.05		Date of Collection: Date of Analysis: 1	and the second s
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	2.0	Not Detected	6.5	Not Detected
Toluene	2.0	Not Detected	7.6	Not Detected
Ethyl Benzene	2.0	Not Detected	8.8	Not Detected
m,p-Xylene	2.0	Not Detected	8.8	Not Detected
o-Xylene	2.0	Not Detected	8.8	Not Detected
Methyl tert-butyl ether	8.1	Not Detected	29	Not Detected
tert-Amyl methyl ether	8.1	Not Detected	34	Not Detected
Isopropyl ether	8.1	Not Detected	34	Not Detected
Ethyl-tert-butyl ether	8.1	Not Detected	34	Not Detected
tert-Butyl alcohol	8.1	Not Detected	24	Not Detected
2-Propanol	8.1	1700 E	20	4200 E
TPH ref. to Gasoline (MW=100)	40	82	160	340
E = Exceeds instrument calibration (range.		3	
Container Type: 6 Liter Summa Car	nister			
·				Method
Surrogates		%Recovery		Limits
Toluene-d8		98		70-130
				70.400

1,2-Dichloroethane-d4

4-Bromofluorobenzene

102

107

70-130

70-130

SAMPLE NAME: VP2@9

ID#: 0412548-07A

File Name: Dij. Factor:	d010313		Date of Collection Date of Analysis:	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Ámount (uG/m3)
Benzene	0.84	Not Detected	2.7	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Methyl tert-butyl ether	3.4	Not Detected	12	Not Detected
tert-Amyl methyl ether	3.4	Not Detected	14	Not Detected
Isopropyl ether	3.4	Not Detected	14	Not Detected
Ethyl-tert-butyl ether	3.4	Not Detected	14	Not Detected
tert-Butyl alcohol	3.4	Not Detected	10	Not Detected
2-Propanol	3.4	3.5	8.2	8.6
TPH ref. to Gasoline (MW=100)	17	600	69	2400
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		97		70-130
1,2-Dichloroethane-d4		97		70-130
4-Bromofluorobenzene		108		70-130

SAMPLE NAME: VP2@9 DUP

ID#: 0412548-08A

File Name: d010314 Date of Collection; Dit Factor: 1,52 Date of Analysis: 1,				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.76	Not Detected	2.4	Not Detected
Toluene	0.76	Not Detected	2.9	Not Detected
Ethyl Benzene	0.76	Not Detected	3.3	Not Detected
m,p-Xylene	0.76	Not Detected	3.3	Not Detected
o-Xylene	0.76	Not Detected	3.3	Not Detected
Methyl tert-butyl ether	3.0	Not Detected	11	Not Detected
tert-Amyl methyl ether	3.0	Not Detected	13	Not Detected
Isopropyl ether	3.0	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.0	Not Detected	13	Not Detected
tert-Butyl alcohol	3.0	Not Detected	9.2	Not Detected
2-Propanol	3.0	Not Detected	7.5	Not Detected
TPH ref. to Gasoline (MW=100)	15	440	62	1800
Container Type: 6 Liter Summa Car	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		110		70-130

SAMPLE NAME: VP2@12

ID#: 0412548-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Date of Collection:	
Dil. Factor: 1.58 Date of Analysis: 1	

Compound	Rpt. Limit (ppbv)	Amount (ppby)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.79	2.9	2.5	9.2
Toluene	0.79	1.4	3.0	5.4
Ethyl Benzene	0.79	Not Detected	3.4	Not Detected
m,p-Xylene	0.79	1.3	3.4	5.8
o-Xylene	0.79	Not Detected	3.4	Not Detected
Methyl tert-butyl ether	3.2	18	11	64
tert-Amyl methyl ether	3.2	Not Detected	13	Not Detected
Isopropyl ether	3.2	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.2	Not Detected	13	Not Detected
tert-Butyl alcohol	3.2	Not Detected	9.6	Not Detected
2-Propanol	3.2	110	7.8	280
TPH ref. to Gasoline (MW=100)	16	2400	65	9800

Container Type: 6 Liter Summa Canister

••		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	109	70-130

SAMPLE NAME: VP3@3

ID#: 0412548-10A

File Name:	d010316 1,36		Date of Collection Date of Analysis: -1	40-26-4
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.68	Not Detected	2.2	Not Detected
Toluene	0.68	1.2	2.6	4.3
Ethyl Benzene	0.68	Not Detected	3.0	Not Detected
m,p-Xylene	0.68	1.6	3.0	7.0
o-Xylene	0.68	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	2.7	Not Detected	9.8	Not Detected
tert-Amyl methyl ether	2.7	Not Detected	11	Not Detected
Isopropyl ether	2.7	Not Detected	11	Not Detected
Ethyl-tert-butyl ether	2.7	Not Detected	11	Not Detected
tert-Butyl alcohol	2.7	Not Detected	8.2	Not Detected
2-Propanol	2.7	2.7	6.7	6.6 J
TPH ref. to Gasoline (MW=100)	14	480	56	2000
J = Estimated value.				
Container Type: 6 Liter Summa Can	ister			
Surrogates		%Recovery		Method Limits
Toluene-d8		99		70-130
1,2-Dichloroethane-d4		103		70-130
4-Bromofluorobenzene		109		70-130

SAMPLE NAME: VP3@9

ID#: 0412548-11A

File Name:	d010317		Date of Collection:	12/22/04
Dil. Factor:	1.55		Date of Analysis: 1	/3/05 10:08 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.78	Not Detected	2.5	Not Detected
Toluene	0.78	Not Detected	2.9	Not Detected
Ethyl Benzene	0.78	Not Detected	3.4	Not Detected
m,p-Xylene	0.78	0.86	3.4	3.7
o-Xylene	0.78	Not Detected	3.4	Not Detected
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
tert-Amyl methyl ether	3.1	Not Detected	13	Not Detected
Isopropyl ether	3.1	Not Detected	13	Not Detected
Ethyl-tert-butyl ether	3.1	Not Detected	13	Not Detected
tert-Butyl alcohol	3.1	Not Detected	9.4	Not Detected
2-Propanol	3.1	Not Detected	7.6	Not Detected
TPH ref. to Gasoline (MW=100)	16	790	63	3200
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		99		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		107		70-130

SAMPLE NAME: VP3@12 ID#: 0412548-12A

File Name: Dil. Factor:	d010413 .2,88	ADEC .		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.4	180	4.6	560
Toluene	1.4	11	5.4	42
Ethyl Benzene	1.4	5.6	6.2	24
m,p-Xylene	1.4	6.4	6.2	28
o-Xylene	1.4	2.6	6.2	11
Methyl tert-butyl ether	5.8	Not Detected	21	Not Detected
tert-Amyl methyl ether	5.8	Not Detected	24	Not Detected
Isopropyl ether	5.8	Not Detected	24	Not Detected
Ethyl-tert-butyl ether	5.8	Not Detected	24	Not Detected
tert-Butyl alcohol	5.8	Not Detected	17	Not Detected
2-Propanol	5.8	12	14	30
TPH ref. to Gasoline (MW=100)	29	7100	120	29000
Container Type: 6 Liter Summa Can	ister			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		102		70-130
4-Bromofluorobenzene		107		70-130

SAMPLE NAME: VP3@12 Duplicate

ID#: 0412548-12AA

File Name:	d010414 l		Date of Collection:	12/22/04
Dil. Factor:	2.88	2.88 Date of Analysis: 1/4/05		/4/05 08:14 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limít (uG/m3)	Amount (uG/m3)
Benzene	1.4	180	4.6	560
Toluene	1.4	11	5.4	41
Ethyl Benzene	1.4	5.7	6.2	25
m,p-Xylene	1.4	7.1	6.2	31
o-Xylene	1.4	2.5	6.2	11
Methyl tert-butyl ether	5.8	Not Detected	21	Not Detected
tert-Amyl methyl ether	5.8	Not Detected	24	Not Detected
Isopropyl ether	5.8	Not Detected	24	Not Detected
Ethyl-tert-butyl ether	5.8	Not Detected	24	Not Detected
tert-Butyl alcohol	5.8	Not Detected	17	Not Detected
2-Propanol	5.8	12	14	30
TPH ref. to Gasoline (MW=100)	29	7100	120	29000
Container Type: 6 Liter Summa Ca	nister			
Surrogates		%Recovery		Method Limits
Toluene-d8		98		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		106		70-130

SAMPLE NAME: Trip Blank

ID#: 0412548-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1010409			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

	,	Method
Surrogates	%Rесоvегу	Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

SAMPLE NAME: Lab Blank

ID#: 0412548-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Flie Name: Dil. Factore	i128007			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1 ·	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicable				
Surrogates		%Recovery		Method Limits
Toluene-d8		96		70-130

1,2-Dichloroethane-d4

4-Bromofluorobenzene

100

102

70-130

70-130

SAMPLE NAME: Lab Blank

ID#: 0412548-14B

File Name:	4010305 1.00		Date of Collection: I Date of Analysis: 1	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicable				
Surrogates		%Recovery		Method Limits
Toluene-d8		99		70-130
1,2-Dichloroethane-d4		96		70-130
4-Bromofluorobenzene		106		70-130

SAMPLE NAME: Lab Blank

ID#: 0412548-14C

Ffle Name:) Dill. Factor:	/ d010405	rakan merendakan Marajaran	Date of Collection; NA Date of Analysis: 1/4/05 12:11 RM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	110	70-130

SAMPLE NAME: Lab Blank ID#: 0412548-14D

File Name:	1010405 100		Data of Collection) Date of Analysis: 1	Property Comments and Comments
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Container Type: NA - Not Applicable				
Surrogates		%Recovery		Method Limits
Toluene-d8		95		70-130
1,2-Dichloroethane-d4		100		70-130
4-Bromofluorobenzene		117		70-130

SAMPLE NAME: CCV

ID#: 0412548-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Benzene	80
Toluene	90
Ethyl Benzene	94
m,p-Xylene	102
o-Xylene	. 105
Methyl tert-butyl ether	88
tert-Amyl methyl ether	103
Isopropyl ether	108
Ethyl-tert-butyl ether	107
tert-Butyl alcohol	102
2-Propanol	89
TPH ref. to Gasoline (MW=100)	Not Spiked

•		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	118	70-130

SAMPLE NAME: CCV

ID#: 0412548-15B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 6010302	Date of Collection: NA
File Name: d01/03/02	
DIL Factor: 4.00	Date of Analysis: 1/3/05 08:40 AM

Compound	%Recovery
Benzene	93
Toluene	100
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	108
Methyl tert-butyl ether	96
tert-Amyl methyl ether	86
Isopropyl ether	73
Ethyl-tert-butyl ether	82
tert-Butyl alcohol	76
2-Propanol	79
TPH ref. to Gasoline (MW=100)	Not Spiked

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	94	70-130	
4-Bromofluorobenzene	112	70-130	

SAMPLE NAME: CCV

ID#: 0412548-15C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Approved Collection	
File Name: Date of Collection	SNA STATE
Diff Factor: 4 00 Page of Analogies	
Dil. Factor: 1.00 Date of Analysis:	

Compound	%Recovery
Benzene	97
Toluene	105
Ethyl Benzene	110
m,p-Xylene	114
o-Xylene	111
Methyl tert-butyl ether	97
tert-Amyl methyl ether	89
Isopropyl ether	74
Ethyl-tert-butyl ether	83
tert-Butyl alcohol	73
2-Propanol	74
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	110	70-130	

SAMPLE NAME: CCV

ID#: 0412548-15D

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1010402 3	Date of Collection NA
	Date of Analysis: 1/4/05 09:20 AM
Dil. Factor: 4-00	

Compound	%Recovery
Benzene	81
Toluene	92
Ethyl Benzene	95
m,p-Xylene	104
o-Xylene	108
Methyl tert-butyl ether	89
tert-Amyl methyl ether	87
Isopropyl ether	92
Ethyl-tert-butyl ether	92
tert-Butyl alcohol	85
2-Propanol	89
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	103	70-130	
4-Bromofluorobenzene	127	70-130	

SAMPLE NAME: LCS

ID#: 0412548-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	The state of the s
File Name: 1123004 Date o	f Collection: NA
	A中のインタングによりは、アメント・グラン・グラング・イン・ストランド、ボルス・スタース・アン・大田 (1997)
Dil Factor: 1.00 Date of	rf Analysis: 12/30/04 06:20 AM

Compound	%Recovery
Benzene	90
Toluene	91
Ethyl Benzene	94
m,p-Xylene	105
o-Xylene	109
Methyl tert-butyl ether	100
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	90
TPH ref. to Gasoline (MW=100)	Not Spiked

• • • • • • • • • • • • • • • • • • • •		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	102	70-130	
4-Bromofluorobenzene	121	70-130	

SAMPLE NAME: LCS

ID#: 0412548-16B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

	Date of Collection	
Name:		
Factor:	Date of Arialysis:	

Compound	%Recovery
Benzene	101
Toluene	98
Ethyl Benzene	102
m,p-Xylene	108
o-Xylene	105
Methyl tert-butyl ether	108
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	78
TPH ref. to Gasoline (MW=100)	Not Spiked

		IVIETHOU
Surrogates	%Recovery	Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	110	70-130

SAMPLE NAME: LCS

ID#: 0412548-16C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: d010403	Date of Collection: NA
Dil Factor: 1.00	
Dil. Factor: 1.00	Date of Analysis: 1/4/05 10:25 AM

Compound	%Recovery
Benzene	102
Toluene	109
Ethyl Benzene	113
m,p-Xylene	118
o-Xylene	109
Methyl tert-butyl ether	100
tert-Amyl methyl ether	Not Spiked
Isopropyl ether	Not Spiked
Ethyl-tert-butyl ether	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	82
TPH ref. to Gasoline (MW=100)	Not Spiked

		Method Limits	
Surrogates	%Recovery		
Toluene-d8	96	70-130	
1,2-Dichloroethane-d4	97	70-130	
4-Bromofluorobenzene	111	70-130	

SAMPLE NAME: LCS

ID#: 0412548-16D

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j010463 Date of Collection: NA
Dil. Factor: 100 Date of Analysis: 1/4/05 10:14 AM

Compound	%Recovery	
Benzene	84	
Toluene	92	
Ethyl Benzene	93	
m,p-Xylene	102	
o-Xylene	99	
Methyl tert-butyl ether	84	
tert-Amyl methyl ether	Not Spiked	
Isopropyl ether	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
2-Propanol	82	
TPH ref. to Gasoline (MW=100)	Not Spiked	

Contained types to the temperature		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1.2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	129	70-130	

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

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Page of 2-

Company Cambrid Email Soven Dean Sin - env P.O. # 9-0260 Time: Pres Address 5900 Hollis 51. Stity Community State 44 Zip 94608 Normal Date	ssucization Gas:
Address 5900 Hollin 51. Eity Consumily State 44 Zip 9468 P.O. # - Normal Date	s /2/7/// Sas:
Authors 272 (Carrottal State 27 Zip 94toy	asutization Gas:
Phone <u>5(0 478 3350 Fax 5/6 420 9170 Project# 9-07-60</u> Project# 9-07-60 Project	- A ()
Collected by: (Signature) Sarah Coly Oct Project Name Hayward specify	N ₂) He
Canister Pr	ressure/Vacuum
Lab 1.D. Field Sample I.D. (Location) Date Time Analyses Requested initial Final	
: OLA VPI 23 12/21/04 # 11:33 TPHQ. BTEX MTBE -30 -2	
02A UP 2 3 OLD 2/22/04 1109 TAME, TRA DIPE, -30 -7	5.54
034 VPI 29 121/04 12124 ETBE 1 TO 15 630-7	3.544
04A VPI D 12 12/21/04 1.40 -30 -11	
OSA VP2 23 12/21/04 4:45 tor all -28 -6	9.6"Ha
06A VPZ 23 OLD 12/22/04 10:33 4-30-6	3.5 A
07A VP2 29 2/21/04 3:54 -29 -8	6.076
08A V + 2 29 Jup 12/21/04 8:54 -29 -5	
09A VP 2 20 12 12/12/104 3:08 -30 -6	
	- 130/B X
Relinquished by: (signature) Date/Time 12/28/04 Received by: (signature) Date/Time Notes: VP1@12, VP2@12,	VP2004 5
12:25 CTV 012 12:25 NO 12/28/04 11:25 an VOTA 9/10-Com	ulater areals ic
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Refinquished by: (signature) Date/Time Date/Time Received by: (signature) Date/Time Received by: (signature) Date/Time	4
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CHAIN-OF-CUSTODY RECORD

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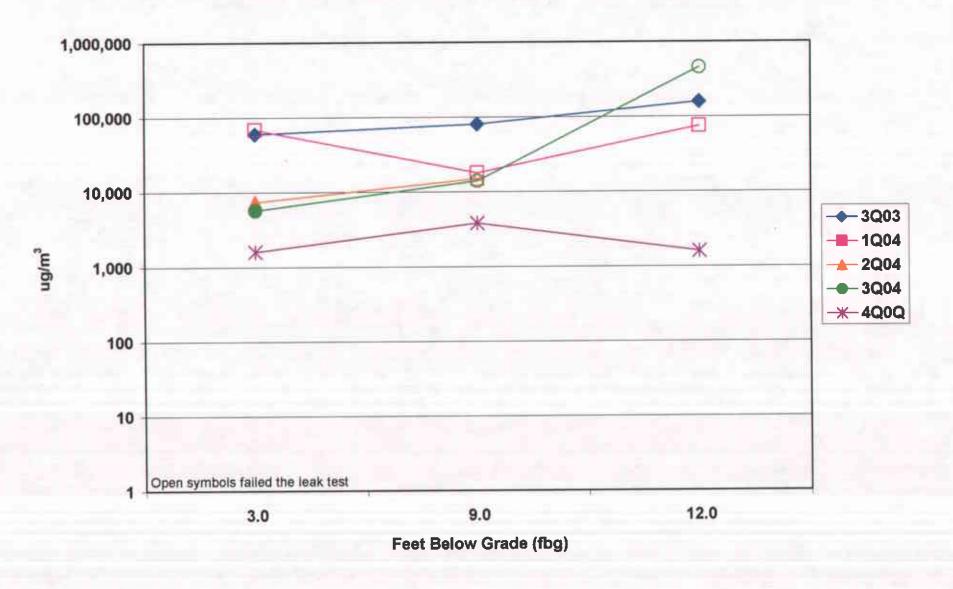
FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

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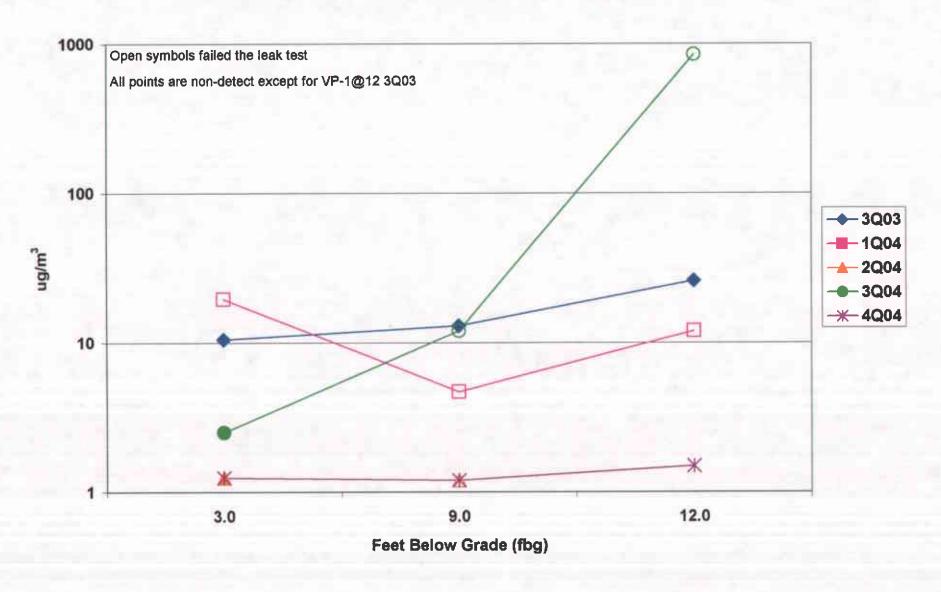
releted.	or sh	oping of samples. D.O.T. Hotline (800) 487-4922		Page or
Company Cambria Email S	over acomprise-con	Project Info:	Turn Around Time:	Pressurized by:
Address Stor Hollis St. Ste A Chy Emmyille	State <u>C.A.</u> Zip <u>9468</u>	P.O.# 9-0260	☐ Nomai	Date: 12 24 64
Phone 510 470 3350 Fax 510 4		Project # 9-02-60	☐ Rush	Pressurization Gas:
Collected by: (Signature) Small Cody Our	cu_	Project Name	specify	₩ He
Lab I.D. Field Sample I.D. (Location)	Date Time	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Canist	er Pressure/Vacuum
	Date Time	Analyses Requested	Initial	Final Receipt Final
	2/22/04 11:45	TPHQ, GTEK, MTBE	-30	4 0.54 5:00
11A VP3 29	2/22/04 12:43	TAME FOR DIPE	-30	-8 4.0'H
12A VP3 212 1	12/22/04 1150	ETOE by TOIS	4.30	-5 20 H
	2/20/04 10:20	P - C all	-30	2900 V
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	,, <u> </u>		_ , ,	_
Relinquished by: (signature) Date/Time /2/23/04				
Sund Cake Cross 11:25	Received by: (signature)	Date/Time Notes: 12-28-c4 11:26am		
Relinquished by: (signature) Date/Time		Date/Time		
CECOMO 12.28-04	DHL Shipping			
Relinquished by: (signature) Date/Time	Received by: (signature)			
· · · ·	masif	Was th 120 12/29		
Lab: Shipper Name. Air Bill	Temp (%	Condition Custody Se		Work Order#
Only 588 485 452:		Sport Yes No	None	0412548

ATTACHMENT D Soil Vapor Trend Graphs

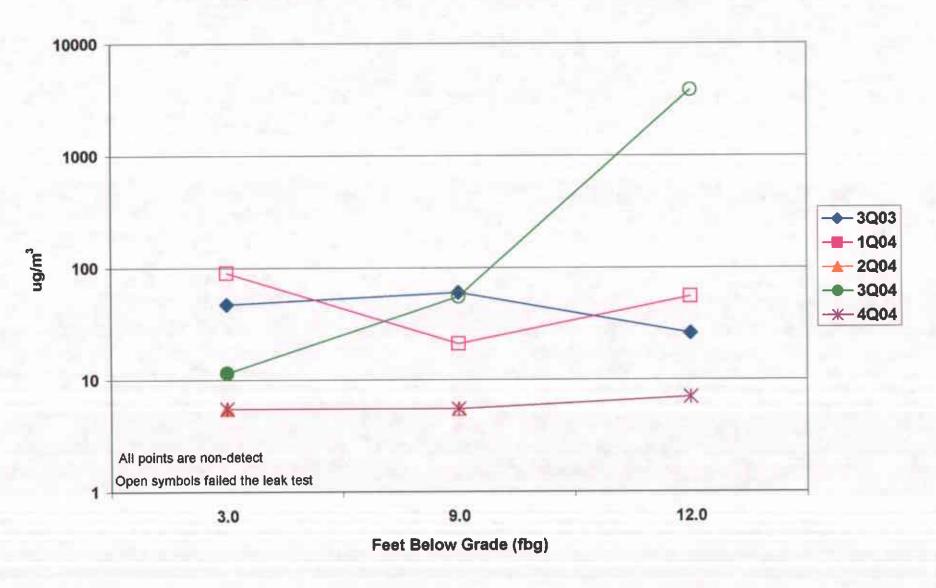
Soil Vapor Concentrations of TPHg in Vapor Point VP-1



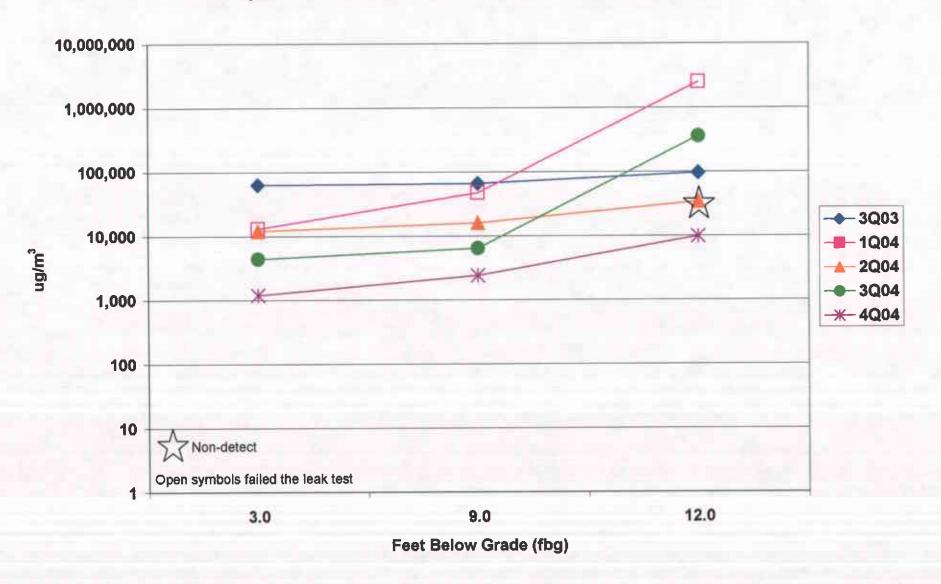
Soil Vapor Concentration of Benzene in Vapor Point VP-1



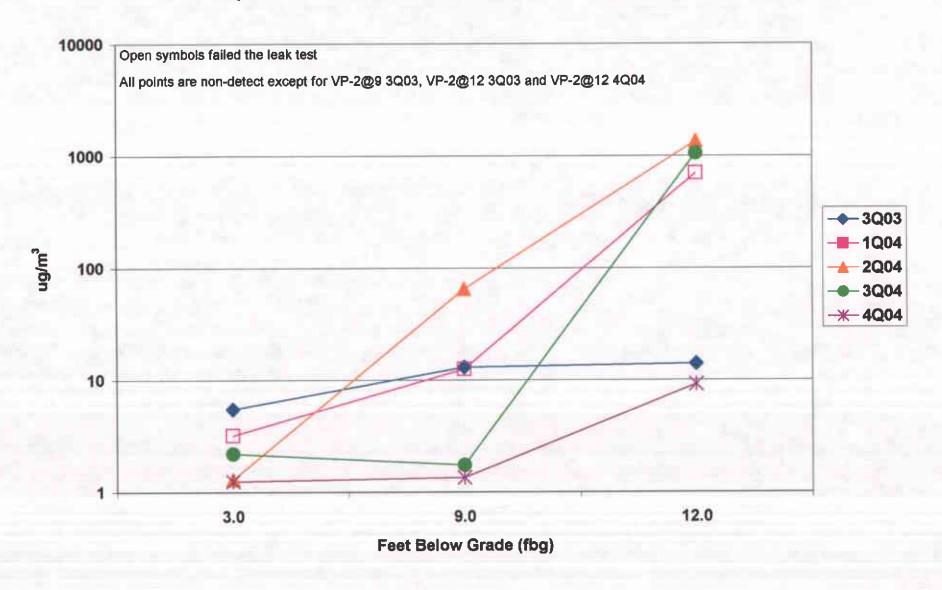
Soil Vapor Concentrations of MTBE in Vapor Point VP-1



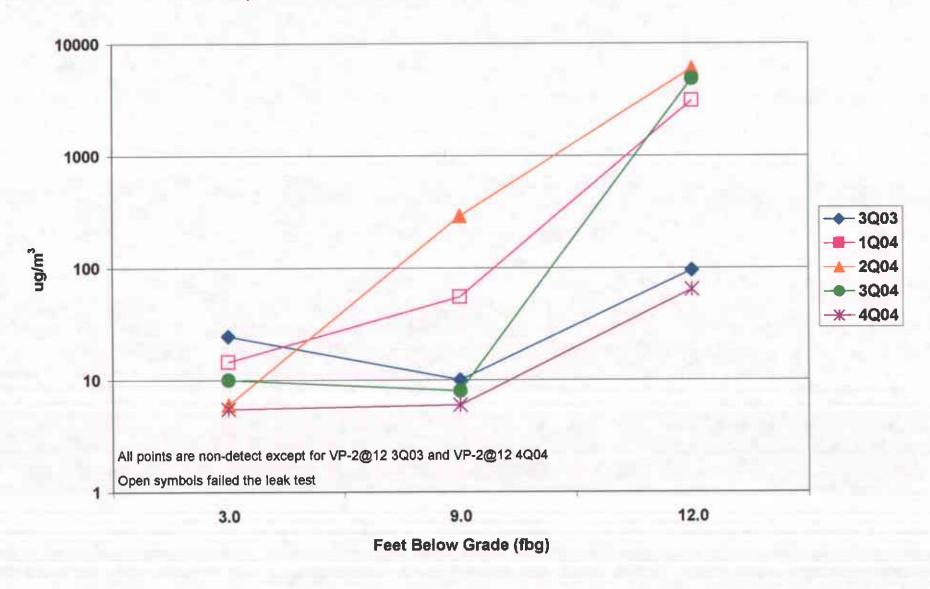
Soil Vapor Concentrations of TPHg in Vapor Point VP-2



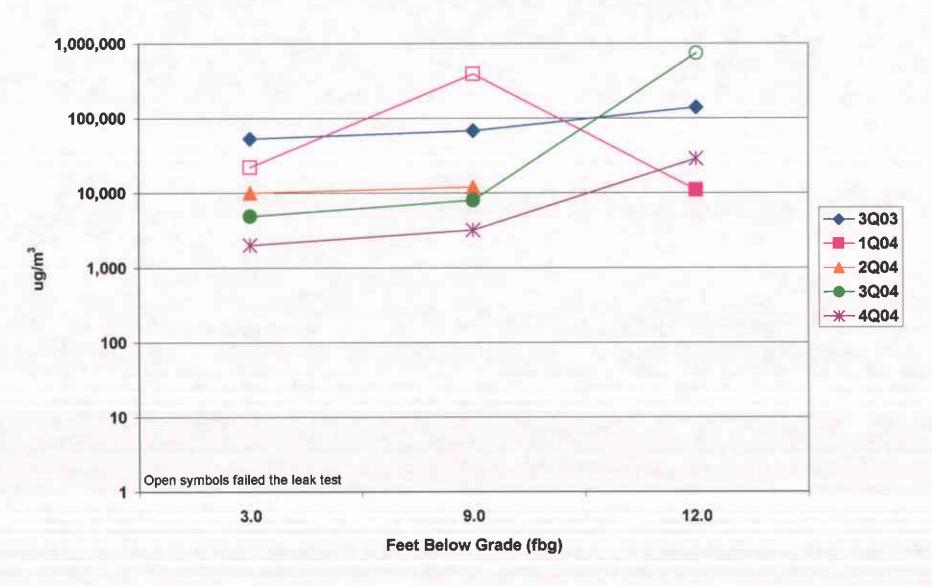
Soil Vapor Concentrations of Benzene in Vapor Point VP-2



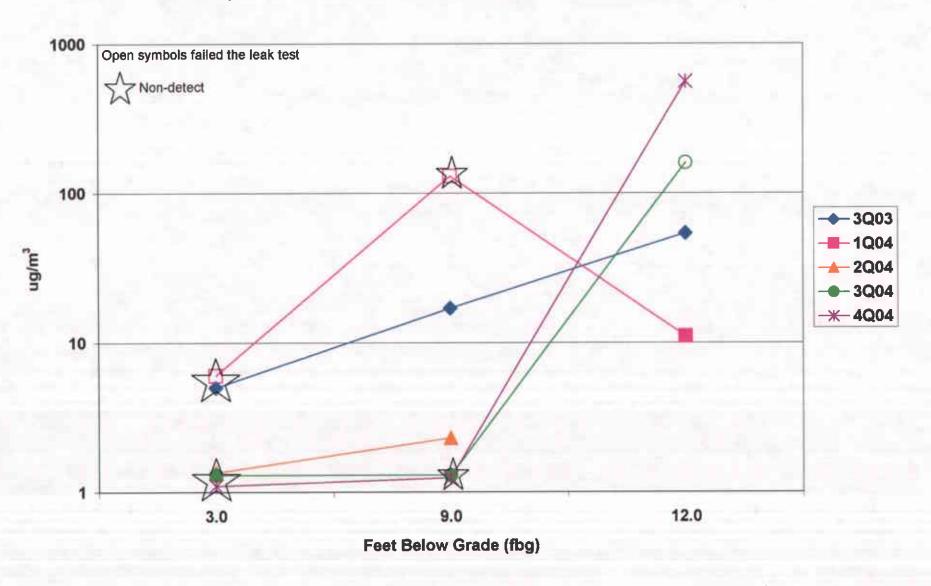
Soil Vapor Concentrations of MTBE in Vapor Point VP-2



Soil Vapor Concentrations of TPHg in Vapor Point VP-3



Soil Vapor Concentrations of Benzene in Vapor Point VP-3



Soil Vapor Concentrations of MTBE in Vapor Point VP-3

